Report on the interlinkages between forestry-related regimes

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REDD ALERT – Reducing Emissions from Deforestation and Degradation through Alternative Landuses in Rainforests of the Tropics (contract number 226310)

Deliverable D.4.2

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Executive Summary

This second deliverable of REDD-ALERT Work Package 4 compares and contrasts three global forest-related regimes and organizations, with a view to examining the incentives they create for lower levels of governance and to assessing their interlinkages with the global climate change regime established by the 1992 United Nations Framework Convention on Climate Change (UNFCCC). We are thus interested in (a) to what extent these global arrangements really have the potential to stimulate behavioural change with regard to deforestation and forest degradation on the ground and (b) how they interact with the climate regime, which, with the advent of REDD, looks set to shift the focus of forest governance to a much narrower, carbon-focused outlook. Last but not least, we also ask what lessons these three regimes hold for the future design and implementation of REDD. Among the 19 forest-related governance arrangements identified in Deliverable D4.1 (Haug et al., 2010), the Convention on Biological Diversity (CBD), the Global Environment Facility (GEF) and the International Tropical Timber Organization (ITTO) were chosen as the focus of this study.

Convention on Biological Diversity

The *Convention on Biological Diversity (CBD*) was one of two environmental conventions signed at the Rio Summit in 1992. With 193 Parties to date, it has gained almost universal membership. The convention has three main objectives: 1) the conservation of biological diversity; 2) the sustainable use of its components; and 3) the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. The CBD as a whole thus takes a holistic approach to biodiversity protection, which manifests itself in the concepts at the heart of the convention: firstly, the notion of sustainable use, which can be described as making use of the interest, while leaving the capital untouched. Secondly, the notion of an ecosystem approach to conservation and sustainable use. Further concepts of relevance to the CBD are the precautionary principle (which, however, is not mentioned as such in the convention) and the concept of conservation.

Looking at the more operational parts of the Convention, the primary subjects of the incentives and disincentives that it gives rise to are national governments. The first type of incentive is provided through specific targets and timetables, in particular the (non-binding) 2010 Biodiversity Target, which established various sub targets relevant to forest biodiversity. Secondly, the CBD includes financial incentives to enhance Parties' compliance with the treaty. To this end, the CBD established a financial mechanism to support developing countries in implementing the Convention, which is operated by the GEF. A third set of incentives is created by the Convention's provisions on the transfer of technology. Last but not least, the, CBD contains reporting requirements; Parties are obliged to regularly report on measures taken to implement the treaty. By and large, the majority of Parties has met its requirements in this regard, and reporting quality has improved over time.

In terms of governance, the main decision-making body of the CBD is the Conference of the Parties (COP), supported by the Subsidiary Body on Scientific, Technical and Technological Advice. The CBD Secretariat constitutes an important institutional backbone. NGOs play an important role in ensuring compliance by providing expertise to and exerting pressure on government delegates. Another actor group active in the CBD is the private sector, which have been mainly active in the context of discussions on biosafety and access- and benefit-sharing.

In terms of specific forest-related policies and provisions within the CBD, various provisions and decisions are of relevance. These include the decisions on Protected Areas; guidance to the financial mechanism; incentive measures; and biodiversity and climate change. The CBD's initial activities on forest biodiversity were partly in response to the Intergovernmental Panel on Forests. A first three-year work programme on forest biological diversity, focusing on research and the development of technologies relevant for the conservation and sustainable use of forest biodiversity, was adopted by the COP in 1998. Three years later, in 2000, an Ad Hoc Technical Expert Group on forest biological diversity was established, with the task to provide advice on the state of forest biodiversity and to suggest priority actions for the conservation and sustainable use thereof. An expanded, more action-oriented work programme subsequently replaced the initial, rather narrow work programme in 2002. Overall, the activities of the CBD in the area of forest biodiversity have significantly expanded over time. While the in-depth review of the programme of work reveals that Parties have started with its implementation, it is another question in how far it is effective in achieving its goals—or the broader goals of the CBD—given that it complements a range of other international initiatives in the area of forest governance.

Moving on the question of interlinkages between the CBD and the climate regime, there is clearly a close and varied interrelation between the goal of protecting biodiversity and the challenge of climate change. The mitigation potential of enhancing forest carbon sinks bears both risks and opportunities for forest biodiversity conservation. In terms of institutional interlinkages, discussions mainly focused on the biodiversity implications of the implementation of the Kyoto Protocol, particularly following decisions on land use, land use-change and forestry, and the use of carbon sinks in the Protocol's Clean Development Mechanism. However, while the Parties to the CBD and its Secretariat have actively sought to manage linkages between the two regimes, the rules developed under the Kyoto Protocol have only paid lip service to biodiversity protection and the CBD. Overall, the climate regime has clearly dominated rule development on aspects which concern both the climate and biodiversity regimes. The climate-biodiversity interlinkages have only become more salient with the emergence of REDD. CBD Parties and the CBD Secretariat actively seek to keep biodiversity concerns on the REDD negotiating agenda, and various initiatives to create awareness of climate-biodiversity interlinkages have taken place. How successful these will be in the end in incorporating biodiversity concerns in REDD mechanism design, however, remains to be seen.

In terms of lessons learned, the CBD's emphasis on an ecosystem approach, as well as its inclusion of the interests of indigenous and local communities provide a good example to approach REDD in a holistic fashion, rather than a focus purely on the carbon sink function of forests. However, the discussion of interlinkages between the CBD and the climate regime indicates that it may be difficult to integrate biodiversity concerns into a REDD mechanism developed under the UNFCCC.

Global Environment Facility

The *Global Environment Facility (GEF)* came into being in 1991 as a pilot programme of the World Bank. Three years later, in 1994, it was moved out of the World Bank system and became a separate, permanent institution, although the World Bank remained a trustee of the GEF Trust Fund. The GEF's mandate is to provide grants and concessional funding to cover the incremental cost for projects that yield global environmental benefits. The GEF is also the financial mechanism for a number of multilateral environmental agreements, including the CBD, the UNFCCC and its Kyoto Protocol.

According to the most recent version of the Instrument for the Establishment of the Restructured GEF, the GEF is to serve as a mechanism for international cooperation for the purpose of providing new and additional grant and concessional funding to meet the agreed incremental costs of measures to achieve agreed global environmental benefits in the areas of biological diversity; climate change; international waters; land degradation, primarily desertification and deforestation; ozone layer depletion; and persistent organic pollutants. The GEF's mandate can be interpreted to include both the pursuit of global environmental benefits, and catalyzing environmental action by incorporating global environmental concerns in projects that otherwise would not have done so; by encouraging cofinancing; and by financing innovative projects. For understanding the GEF, the notion of 'incremental costs' is of fundamental importance; GEF funding is supposed to cover only the additional costs incurred when redesigning an activity compared to a baseline in order to address global environmental problems, whereas the remainder of the funding needed for projects has to be met by co-financing.

The main incentives provided by the GEF are financial in nature. They are, however, not only aimed at governments; a wide range of actors, including NGOs, can access GEF funding, provided they meet the eligibility criteria. According to GEF estimates, since its inception the institution has allocated US$ 8.8 billion for over 2,400 projects in more than 165 countries, and leveraged another US$ 36.1 billion in cofinancing. The largest part of the GEF budget has gone to the biodiversity focal area, closely followed by climate change. In terms of allocation to countries, a relatively large share of GEF funding in the period 1991-2005 was allocated to the larger developing countries, including China, Brazil, Mexico, India and Russia. With the fourth replenishment cycle, the allocation moved towards a performance-based system, the Resource Allocation Framework (RAF), which, however, was soon considered too complex and non-transparent and replaced by a revised allocation system for the fifth replenishment of the GEF. This new scheme, called the System for Transparent Allocation of Resources (STAR), seeks to alleviate the RAF's bias towards larger, more developed countries by instituting a minimum allocation for all countries and by adding a factor to the composite disbursement index that results in higher allocations for countries with a lower gross domestic product.

In terms of its institutional set-up, the GEF Council is the main decision-making body of the GEF and is responsible for developing, adopting and evaluating the operational policies and programs for GEF-financed activities. Next to it, the GEF Assembly, comprised of the member states of the GEF, reviews the policies and operations of the GEF. The task of the GEF's implementing and executing agencies is to oversee projects on the ground, and to support eligible governments and NGOs in developing and implementing projects. The World Bank as the GEF Trustee and the GEF Secretariat provide the administrative structure of the GEF. Finally, the role of the COPs of the conventions serviced by GEF is primarily to provide guidance to the facility.

Forestry and forest management was not one of the initial focal areas of the GEF, but it has been active in this field nevertheless. The GEF has financed more than 300 projects in the area of forest conservation and management, worth over US$1.6 billion, and leveraging a further US$5 billion in cofinancing. In 2007, the GEF Council decided on a separate, cross-cutting strategic programme for sustainable forest management, which between 2007 and 2009 has funded projects worth about US$ 200 million. Sustainable forest management and land use, land-use change and forestry (LULUCF) became more prominent in the fifth replenishment cycle. The new strategy includes two revised strategic objectives, which are: 1) to reduce pressures on forest resources and generate sustainable flows of forest ecosystem services; and 2) to strengthen the

enabling environment to reduce greenhouse gas emissions from deforestation and forest degradation and enhance carbon sinks from LULUCF activities. In particular, the GEF has created a 'funding envelope' for sustainable forest management and reducing emissions from deforestation and forest degradation (REDD) of US$ 250 million.

There are clear interlinkages between the substantive areas covered by the GEF and the climate regime and the CBD. The GEF's mandate with regard to forests, however, is broader than that of the climate regime, covering forests' non-carbon functions as well, and being inspired not only by guidance of the UNFCCC COP, but also by that of the other conventions. Furthermore, at the institutional level, the GEF serves as the financial mechanism for both the UNFCCC and the CBD. Prompted by guidance from the UNFCCC, but also from the CBD COPs, the GEF has increased its focus on forests over time, in particular through its work on sustainable forest management in the fourth and fifth replenishment cycles. Especially in the fifth replenishment, the role of forests as carbon sinks has come to the forefront, and lately the GEF has also increased its involvement in REDD.

One of the ways in which the GEF has sought to respond to the interlinkages between its work and the climate regime is by moving away from sectoral thinking, and finding ways to explore synergies among focal areas. Its creation of sustainable forest management as a crosscutting area of work represents a change in strategic thinking that goes beyond assigning specific problems to specific focal areas, but acknowledging that certain issues are of relevance for the various conventions. On the whole, the GEF is increasingly becoming aware that it is well-placed to maximize synergies between the issues of climate change, biodiversity and land degradation through its work on sustainable forest management, LULUCF and REDD. To what extent it is able to maximize these synergies in practice remains to be seen however.

Looking for lessons learned from the functioning of the GEF for REDD, its history first of all shows how challenging it is to operationalize concepts such as 'global environmental benefits', 'incremental costs' and 'additionality' – these are issues that REDD projects will also face in due time. GEF experience also demonstrates that it has so far been easier to distinguish between global and national benefits in climate change projects than in biodiversity projects. Furthermore, the GEF has already faced a dilemma that REDD is likely to confront as well: the question of how to target the 'right' countries. The GEF's RAF applied in the fourth replenishment resulted in funding being diverted from the least-developed countries to the larger economies, a result of the strong emphasis on governance performance. In the case of forest governance, such an approach would lead to even less funding for countries where combating deforestation is already inhibited by weak governance structures.

International Tropical Timber Organization

The *International Tropical Timber Organization (ITTO)* is one of the very few international organizations focusing solely on forests. The ITTO came into being in 1985 as the organization implementing the 1983 International Tropical Timber Agreement (ITTA), and fulfils that same function for its successor agreement, the ITTA 1994. More recently, negotiations to a successor led to the ITTA 2006, which is yet to enter into force.

The ITTO is in the first place a commodity organization, whose mandate is to facilitate and regulate the international trade in tropical timber between producer and consumer countries. Throughout its history, there has been debate over the ITTO's scope (to focus on only tropical timber or also other kinds of timber, or even non-timber forest products and ecosystem services), classification of membership groups (to divide

members into producer/consumer countries or developed/developing countries) and objectives (to focus on trade or conservation). The ITTO's stated objectives reflects the fundamental tension in its mandate: on the one hand, it stresses the need to pursue sustainable development and to ensure the conservation of forests while, on the other hand, the agreement still promotes the expansion and diversification of the international tropical timber trade. Not without reason, therefore, both the ITTA 1994 and the ITTA 2006 emphasize countries' sovereignty over their natural resources. Arguably, another key concept of the ITTO is the conservation of tropical forest resources. However, the adherence to conservation is seen by some as being merely of a symbolic nature. Finally, the concept of sustainable forest management stands central in the ITTO's work. To provide practical guidance on how to interpret the term, ITTO was the first organization to develop criteria and indicators for the sustainable management of tropical forests in 1992

The ITTA provides various, but on the whole rather weak, incentives to achieve its dual objectives of promoting timber trade and ensuring sustainable forest management. The primary subjects of these incentives are the member country governments, although some of the incentives may also affect non-state actors, such as timber companies. A first 'target and timetable' type of incentive is the *Objective 2000* to achieve exports of tropical timber products from sustainably managed sources by 2000. The target was very vague and not met at the time, and now remains in place without a specific end date. To what extent it therefore provides a proper incentive for countries to ensure that their timber exports and imports are related to sustainable forest management remains doubtful. The ITTO system also includes limited, financial incentives. Both funds it has established are for the most part based on voluntary contributions. The available funding has been mostly directed to projects in the area of reforestation and forest management. Projects include supporting countries and regions in developing sustainable forest management plans; providing support in using criteria and indicators; supporting community-based forest management; restoring degraded forests, etc..

As to the ITTO's institutional structure, the ITTA grants the 'highest authority' to the International Tropical Timber Council (ITTC), which consists of all the (timber-producing and consuming) members of the ITTO. While the ITTC is mandated to carry out the provisions of the ITTA, it is not mandated to propose additional protocols. In principle, decisions at the ITTC should be taken by consensus, but where this is not possible, a double-weighted voting procedure applies. The ITTO is supported by an Executive Director, who is responsible for the administration and operation of the ITTO, by a small secretariat and by four permanent committees that are to assist the ITTC in its operational work. While the ITTO's policy on observers is rather open NGOs have only been able to exert slight influence.

The forest policies developed by the ITTO primarily consist of the various (non-binding) guidelines it has published. The first guidelines from 1990 contained a set of international principles for the development of national guidelines for the sustainable management of tropical forests for timber production. Others include guidelines on criteria and indicators for the measurement of sustainable tropical forest management, on the conservation and sustainable use of biological diversity in tropical production forests, as well as on the restoration of degraded forests and efforts to combat illegal logging.

While few evaluations of the ITTO's effects on forest management exist, and while it will remain difficult to provide any assessment of the organization in isolation from other international forestry initiatives, it has been noted that the outcomes so far are

at best mixed. The ITTO's objective for 2000 was not met, and the funding it provides remains inadequate. Furthermore, the agreement's contribution to sustainable development has been questioned. However, others have considered the ITTO as influential considering its size and budget, arguing that the organization is well aware of its deficiencies.

The material interlinkages between the ITTO and the climate regime are undeniable. Both regimes have an interest in sustainable forest management, although for different reasons. For the ITTO, the concept is primarily related to sustained timber production and secondly to the conservation of forest; for the UNFCCC, sustainable forest management could contribute to climate change mitigation. Still, the institutional interlinkages are weak. While there is general awareness of each other's existence, normative developments in both the ITTO and the UNFCCC have taken place independently. That this may be changing is indicated by some first calls within the ITTO to take into account climate change considerations in the development of future guidelines. More recently, the ITTO has also become involved in the REDD debate. It introduced a thematic programme on Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests (REDDES). While the organisation acknowledges the existence of various other international initiatives targeting REDD, it argues that the REDDES thematic programme has an added value, among others, because it addresses forest degradation in addition to avoided deforestation, and because it has the possibility to close geographical gaps left by other initiatives. All in all, however, critics claim that the notion of forests as providing commodities still dominates the organization's thinking and that the ITTO still struggles to fully integrate non-timber aspects into its work.

Lessons learnt and challenges ahead

The research concludes that although there have been many administrative steps taken in the three regimes, it is difficult to isolated and evaluate the effectiveness of individual elements of these regimes since there is very little data on evaluation. Against this background, it raises the conceptual challenge of whether REDD should have a single goal or a broad goal, and concludes that past experiences provide no guidance on this, except that a broader goal serves to address multiple challenges. It also argues that REDD should be cautious about differentiating between global and local benefits in its evaluation of the costs of carbon credits as this can be counter productive for the success of projects. In terms of instrument design, the lack of real instruments and monitoring of these instruments provides few lessons in this regime. The voluntary targets and the guidelines have not been tested in terms of leading to converging state policies. The lack of non-compliance mechanisms and the limited role of reporting also weakens these regimes. In terms of management structure, the ITTO voting system seems less preferable to the GEF voting system and there may lessons for the voting structure of a future REDD mechanism; the stressful relationship between GEF and the Climate Convention would argue against emulating that design in terms of relationship between the Climate Convention and the REDD mechanism; and although a REDD mechanism hosted by diverse UN agencies may in theory be able to capitalize on the synergies between the different regimes, it is important to also actually be able to measure these synergies. The report ends with a list of questions that need to be addressed in further follow-up research in this project.

1 Introduction

1.1 The REDD Alert project

The European Union financed REDD ALERT project (contract number 226310) aims: to contribute to the development and evaluation of market and non-market mechanisms and the institutions needed at multiple levels for changing stakeholder behaviour to slow deforestation rates of tropical landscapes and hence reduce GHG emissions.

Its specific objectives are to:

1. Document the diversity in social, cultural, economic and ecological drivers of forest transition and conservation, and the consequences, in the contexts of selected case study areas in Indonesia, Vietnam, Cameroon, and Peru as representative of different stages of forest transition in Southeast Asia, Africa and South America;
2. Quantify rates of forest conversion and change in forest carbon stocks using improved methods;
3. Improve accounting (methods, default values) of the consequences of land use change for GHG emissions in tropical forest margins including peat lands;
4. Identify and assess viable policy options addressing the drivers of deforestation and their consistency with policy approaches on avoided deforestation currently being discussed in UNFCCC and other relevant international processes;
5. Analyze scenarios in selected case study areas of the local impacts of potential international climate change policies on GHG emission reductions, land use and livelihoods; and
6. Develop new negotiation support tools and using these with stakeholders at international, national and local scales to explore a basket of options for incorporating REDD into post-2012 climate agreements.

1.2 Work Package 4 in relation to the Project

A number of work packages are envisaged as part of the research work for this project. Work Package 4 on “policy and governance” aims to:

Assess the options to reduce emissions from deforestation in developing countries (REDD) under the international climate regime in the context of other forest policies, as well as the incentives flowing from them at the national and sub national level, to analyse how these policy levers change human behaviour, and how they interface with the local drivers and pressures of land use change in tropical forest margins. The work in this Work Package will draw on the work on drivers conducted in order to achieve Objective 1 of the Project. The key research question is: What combination of norms, principles and instruments (regulatory, market and suasive) will ensure that the climate change regime provides a policy framework to effectively and equitably govern the transition towards a carbon-extensive future (e.g. through carbon sequestration and bio fuels) while at the same time safeguarding sustainable forestry at a global scale? The objective is thus to analyse the trade-offs between certain forestry related policies within the current climate regime and the larger goal of sustainable forestry.

For details about the Work Package, see Working Document 1.

1.3 Purpose of Deliverable 4.2 in Work Package 4

Within this work package a number of deliverables are envisaged. Deliverable D4.1, "A graphical overview of global forest governance", provided a broad sketch of the architecture of global forest governance and of the various governance arrangements that are part of it at the global and the regional level. Building on this work, Deliverable 4.2 examines three forest-related regimes in more depth and analyses their interrelations with the global climate regime, both in material and in institutional terms. More specifically, the following chapters describe the history of these regimes, their objectives and key concepts, the institutional set-up and main actors involved, as well as the incentives and disincentives they provide for forest governance at lower levels of governances. The objective of this exercise is to analyse and compare these regimes and to examine what could be the lessons learned, if any, for the design and implementation of a global REDD mechanism.

In selecting three regimes for further analysis in this report, the following criteria were taken into account:

- The regime is global in scope;
- Its mandate (at least implicitly) includes addressing deforestation;
- The regime provides specific incentives for combating deforestation; and
- Relevant policy documents are available.

From the 19 global forest-related governance arrangements identified in Deliverable D4.1 (Haug et al., 2010), we eventually selected the following for further analysis especially in relation to the climate change regime, based on the criteria above:

1. Convention on Biological Diversity (CBD);
2. Global Environment Facility (GEF); and
3. International Tropical Timber Association (ITTA)

In making our final selection, we also took care to ensure that the shortlisted regimes cover different forest functions as defined by Ruis (2001) and the different ecosystem services. Furthermore they range from a regime exclusively focused on forests and timber (the ITTA), to a broad, multi-purpose financing institution (the GEF) and one of the three Rio conventions, the CBD.

Table 1.1 Selected regimes and forest functions covered.

Regime	Forest function covered
CBD	Conservation of biological diversity and habitat protection of flora and fauna
GEF	Conservation of biological diversity and habitat protection of flora and fauna Soil conservation and erosion control Carbon sinks and sequestration
ITTA	Wood products

1.4 Structure of this document

This report first elaborates on the Convention on Biological Diversity, Forests and Climate Change (see Chapter 2); the Global Environment Facility, Forests and Climate Change (see Chapter 3) and the International Tropical Timber Organization, forests and climate change (see Chapter 4). It then undertakes a comparative analysis of the

three regimes in relation to climate change and forestry before drawing some final conclusions.

2 The Convention on Biological Diversity, Forests and Climate Change

2.1 Introduction

This chapter focuses on the 1992 Convention on Biological Diversity (CBD).[1] The CBD has been deemed the most important global legal instrument contributing to the international forests regime (Humphreys 2006: 191). Of the several forest functions covered by Ruis (2001), the CBD is primarily aimed at the conservation of biological diversity and habitat protection of flora and fauna. As discussed below, however, it is also of relevance for other functions that forests fulfil, including those related to climate change. In addition, biodiversity is a key factor underpinning the functioning of ecosystems, including the provision of the four different services as outlined by the Millennium Ecosystem Assessment (provisioning, regulating, supporting, and cultural services; see Millennium Ecosystem Assessment 2005).

As such, how the CBD has dealt with forests can provide a number of lessons to be learned for forest governance and efforts to reduce deforestation and forest degradation in the climate regime. Furthermore, the CBD is of relevance with respect to integrating biodiversity concerns in the climate regime itself. While the objectives of the CBD and the climate regime are in principle not conflictive, the CBD introduces concepts and approaches that—when applied to the protection of forest biodiversity—may be in discord with the operational details of the climate regime. As discussed in this chapter, this has already been the case with the inclusion of forests in the Kyoto Protocol's flexibility mechanisms. However, this discussion will be equally—or perhaps even more—relevant with the inclusion of a mechanism for reduced deforestation and forest degradation (REDD). Therefore, to fully understand the effects of both the CBD and the climate regime on forests, the interlinkages between both regimes—as well as the way actors in the regimes have dealt with them—need to be examined.

Against this background, this chapter seeks to provide an overview of the CBD, its relevance to forests, and the interlinkages between the CBD and the climate regime with regard to forests. To this end, the chapter is structured as follows. Section 2 first discusses briefly the history, while Section 3 describes some of the key features of the CBD, including an overview of the incentives and disincentives provided by the Convention. Section 4 then continues to discuss the main actors involved in the regime, including the organizational arrangements provided for by the Convention. Section 5 examines the CBD's relevance for, and activities on forest biodiversity, including a discussion of the key decisions on this topic. Section 6 then discusses the interlinkages between the CBD and the climate regime, addressing how the CBD Parties have dealt with these interlinkages in its decisions. Finally, Section 7 provides some of the lessons learned from this case study.

2.2 History

Prior to 1990, international legal instruments aimed at the protection of biological diversity developed primarily in an ad hoc fashion, covering specific species of flora and fauna, or having a limited geographical scope. By the end of the 1980s, there was a widespread recognition that a more comprehensive international agreement was needed (Birnie and Boyle 2002: 568). After preparatory work conducted by the World

[1] Rio de Janeiro, 5 June 1992, 31 ILM 822 (1992).

Commission on Environment and Development's Expert Group on Environmental Law, the IUCN, and the Executive Director of the United Nations Environment Programme (UNEP), the UNEP Governing Council established an Ad Hoc Working Group of Legal and Technical Experts in 1989 with the mandate to draft a legal instrument for the conservation and rational use of biological diversity (Birnie and Boyle 2002: 568; Sands 2003: 516).[2]

There were a host of controversial issues that came to the fore during the negotiations in 1991-1992 (Sharma 1995: 12-13; Birnie and Boyle 2002: 569-570). One contentious issue concerned intellectual property rights (IPRs) and the transfer of technology. Whereas developing countries emphasised that countries hosting genetic resources should have access to the biotechnological research, and be able to benefit from such research, and not pay for products developed on the basis of resources available in their own country. Developed countries, in contrast, argued for a strong IPR regime protecting their biotechnology industries, with a view to providing incentives for scientific innovation and investments in developing countries (Sharma 1995: 16). The compromise reached was that there should be a "fair and equitable sharing of the benefits arising out of the utilization of genetic resources".[3]

Another issue that sparked disagreement between developed and developing countries was the provision of financial resources and the selection of a financial mechanism. While the developing countries sought to include strong commitments on the part of developed countries to provide a certain level of financial resources, developed countries sought to include less mandatory language in the treaty text (Roberts 1992). In the end, the language about providing resources in the CBD is 'softer' than developing countries originally proposed.[4] While the Indian delegation had sought to include the notion of "adequate, new and additional" in the text, this proposal met with opposition from developed countries that did not want to include such a reference (Roberts 1992: 320). On the other hand, developing countries ensured that the determination of the amount of incremental costs to be financed would be by the developing countries and the financial mechanism established by the treaty.

By the fifth meeting of the INC in Nairobi, Kenya, in May 1992, the negotiators managed to get to an agreement on the new treaty, and the CBD was opened for signature at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil a few weeks later. While the negotiating parties reached agreement on several controversial issues, a number of issues remained unresolved. These are, *inter alia*, the inclusion of the precautionary principle; dealing with responsibility for damage to biodiversity; and the listing of protected areas or species (Birnie and Boyle 2002: 570). By the time the final text of the treaty was adopted, the United States had already signalled its reservations about the compromises reached, in particular with respect to the issues of IPRs, technology transfer and finance (Coughlin 1993: 344). Subsequently, at the Rio Summit, the US was the only country that refused to sign the Convention.

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2 The Ad Hoc Working Group was renamed in 1991 to Intergovernmental Negotiating Committee for a Convention on Biological Diversity (INC).

3 Art. 1 CBD; see also Art. 15 CBD.

4 Art. 20.1 CBD states: "Each Contracting Party *undertakes to provide*, in accordance with its capabilities, financial support and incentives in respect of those national activities which are intended to achieve the objectives of this Convention, in accordance with its national plans, priorities and programmes" (emphasis added). An earlier option included the language that developed countries 'commit' themselves to do so (Roberts 1992: 318).

The CBD entered into force on 29 December 1993. It is by now one of the most widely ratified multilateral environmental agreements, with 193 Parties having ratified it (and only the United States being the notable non-Party).

In 1995, Parties to the CBD started negotiations on a Protocol to regulate the transboundary movement of living modified organisms resulting from biotechnology that may have adverse effects on the conservation and sustainable use of biodiversity. These negotiations resulted in the first—and thus far only—protocol to the CBD, the Cartagena Protocol on Biosafety.[5] Given the limited relevance of this treaty to global forest governance and the linkages between forests and climate change, the Cartagena Protocol will not be the focus of this chapter, although occasional references will be made.

2.3 Key features

2.3.1 Objectives

The Preamble to the Convention specifies that biodiversity has an "intrinsic value" as well as an "ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic" value.[6] While the intrinsic value is thus recognised in the Preamble, the remainder of the treaty seems to take a more anthropocentric approach to biodiversity (Birnie and Boyle 2002: 573). In addition, it is noted that biodiversity is a "common concern of humankind".[7] While States have "sovereign rights over their own biological resources", they are also responsible for "conserving their biological diversity and for using their biological resources in a sustainable manner".[8] The Preamble also contains a version of the precautionary principle, which is discussed below.

The Convention has three main objectives: 1) the conservation of biological diversity; 2) the sustainable use of its components; and 3) the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. [9] To achieve these objectives, the treaty contains a number of substantive provisions, which will be discussed below.

2.3.2 Concepts

International law on nature and biodiversity conservation has increasingly taken a more holistic approach, a development of which the CBD is a prime example. This holistic approach is reflected in a number of notions that have become prominent and guiding in the biodiversity regime, including the notions of sustainable use, the ecosystem approach, and the precautionary principle (or approach).

Sustainable use could roughly be described as making use of the interest, while leaving the capital untouched (Hickey 1999: 868). The term became fashionable in the 1980s, and was influenced by earlier concepts used in treaties on nature conservation, such as maximum sustainable yield,[10] rational use,[11] and wise use.[12] These notions all

[5] Cartagena, 29 January 2000, 39 ILM 1027.
[6] Preamble, para. 1 CBD.
[7] Ibid., para. 3.
[8] Ibid., paras. 4-5.
[9] Art. 1 CBD.
[10] For instance, the concept was used in the 1957 Interim Convention on the Conservation of North Pacific Fur Seals.

suggest that utilization of biological resources is an inherent part of their conservation. The CBD defines sustainable use as "the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations".[13] While this definition captures a wide variety of approaches to the protection of biodiversity, the operational provisions of the CBD nevertheless requires Parties to specify what they mean with sustainable use, for instance through their national strategies, plans and programmes (Birnie and Boyle 2002: 576). In particular, the CBD stipulates that each Party should integrate consideration of the conservation and sustainable use of biological consideration in national decision-making; protect and encourage customary use of biological resources in line with conservation or sustainable use requirements; and encourage cooperation between the public and private sector to develop methods for sustainable use.[14] In 2004, the COP adopted the so-called Addis Ababa Principles and Guidelines for the Sustainable Use of Biological Resources, which comprise fourteen separate principles and associated operational guidelines, which are to assist Parties in their implementation of the CBD provisions on sustainable use (CBD 2004a). The concept of sustainable use is closely related to the notion of adopting a (holistic) ecosystem approach as well as the notion of precaution (Rayfuse 2008: 373).

The CBD has been the central instrument for promoting an *ecosystem approach* to conservation and sustainable use. In 1995, Parties stated that "the ecosystem approach should be the primary framework of action to be taken under the Convention" (CBD 1995a: para. 1). After some initial confusion as to what was exactly meant with the term, the CBD Parties adopted a set of principles of the ecosystem approach in 2000 (CBD 2000b; see Box 2.1). Among others, the ecosystem approach embraces community-based approaches by encouraging decentralization of management to the lowest appropriate level. Another principle points to the need of considering ecosystems in their economic context, meaning that economic incentives should be used in the management of ecosystems. Furthermore, inter-relations between different ecosystems (for instance within and outside of protected areas) are stressed. The principles also indicate that management entails balancing and integrating the conservation and use of biodiversity. The ecosystem approach can be seen as encompassing a variety of approaches to the management and protection of biological resources; it does not prescribe a specific approach, as this will always depend on the prevailing conditions in a certain area.

Box 2.1 The 12 principles of the ecosystem approach (CBD 2000b).

1. The objectives of management of land, water and living resources are a matter of societal choice.
2. Management should be decentralized to the lowest appropriate level.

[11] This term is used in Art. VII of the 1940 Western Hemisphere Convention.
[12] This term is used in Art. 3 of the 1971 Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat.
[13] Art. 2 CBD.
[14] Art. 10 CBD.

3. Ecosystem managers should consider the effects (actual or potential) of their activities on adjacent and other ecosystems.
4. Recognizing potential gains from management, there is usually a need to understand and manage the ecosystem in an economic context. Any such ecosystem-management programme should:
   a. Reduce those market distortions that adversely affect biological diversity;
   b. Align incentives to promote biodiversity conservation and sustainable use;
   c. Internalize costs and benefits in the given ecosystem to the extent feasible.
5. Conservation of ecosystem structure and functioning, in order to maintain ecosystem services, should be a priority target of the ecosystem approach.
6. Ecosystems must be managed within the limits of their functioning.
7. The ecosystem approach should be undertaken at the appropriate spatial and temporal scales.
8. Recognizing the varying temporal scales and lag-effects that characterize ecosystem processes, objectives for ecosystem management should be set for the long term.
9. Management must recognize that change is inevitable.
10. The ecosystem approach should seek the appropriate balance between, and integration of, conservation and use of biological diversity.
11. The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.
12. The ecosystem approach should involve all relevant sectors of society and scientific disciplines.

While the *precautionary principle* is not explicitly mentioned, the Preamble states that "where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat".[15] Birnie and Boyle (2002: 574) note that this expression is "significantly weaker" than the one found in the Rio Declaration, but that this weakness is to some extent addressed by the CBD's provisions on environmental impact assessment. Although the notion of precaution is thus included in the CBD, it does not indicate what kind of measures Parties to the CBD should take (cf. Wiener 2008: 605). The notion of precaution addresses an important weakness in reactionary approaches to ecosystem protection: "Given the complexity of ecosystems, the ensuing difficulty of predicting the effects on them of potentially harmful human activities, and the serious and irreversible nature of species extinctions, the principle embodies the pre-eminent response to the failure of reactive conservation policies" (Trouwborst 2009: 425).

Another key concept of the CBD—as well as many other international legal instruments—is that of *conservation*. Parties are to develop national strategies, plans or programmes to this end (or adapt existing ones), and need to integrate

[15] Preamble, para. 9 CBD.

conservation and sustainable use into relevant plans, programmes and policies.[16] The CBD includes more detailed obligations with regard to in-situ and ex-situ conservation of biodiversity. In-situ conservation measures include establishing a system of protected areas or areas where special measures are needed,[17] whereas ex-situ conservation measures include the establishment of facilities for research outside of their natural habitat.[18] Protected areas are an important part of the conservation philosophy of the CBD, although its policies on this issue are to a large part shaped by external actors, such as the IUCN (Humphreys 2006: 194).

Finally, the CBD is one of the instruments emphasizing the role and rights of *indigenous and local communities*. The Preamble to the CBD recognizes "the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources",[19] while Article 8(j) provides the substantive obligation for Parties to "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices".[20] According to Birnie and Boyle (2002: 580), the CBD may not be the forum to bring about clarification of the rights of indigenous and local communities, but it does provide a forum "within which such communities can participate and thus influence the parties when developing policies, guidelines or protocols impinging upon their interests".

2.3.3 Incentives and disincentives

The CBD provides a number of incentives to protect biological diversity. The CBD being an international treaty, the primary subject of these incentives are its Parties, although some of the CBD's incentives may trickle down to the local or individual level, such as financial incentives used for specific projects at the local level.

The first type of incentive for governments is provided through specific *targets and timetables*. In particular, the (non-binding) 2010 Biodiversity Target establishes various sub-targets relevant to forest biological diversity, including the effective conservation of at least 10% of the world's ecological regions (target 1.1); restoring or maintaining species diversity (target 2.1); promoting genetic diversity (target 3.1); promoting the use of products derived from sources that are sustainably managed (target 4.1); and maintaining and enhancing resilience of biological diversity to adapt to climate change (target 7.1).[21] The 2010 Biodiversity Target, which is likely not to be achieved, has been criticized as being overly vague and framed too negatively (Mace et al. forthcoming).

A second type of incentives are *financial incentives* to enhance Parties' compliance with the treaty. The CBD states that "developed country Parties shall provide new and additional financial resources to enable developing country Parties to meet the agreed

[16] Art. 6 CBD.
[17] Art. 8 CBD.
[18] Art. 9 CBD.
[19] "Recognizing the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources". Preamble, para. 12 CBD.
[20] Art. 8(j) CBD. Other relevant provisions include Art. 15 and 18 CBD.
[21] See http://www.cbd.int/2010-target/ for more information (last accessed 13 April 2010).

full incremental costs" of implementing the Convention.[22] To this end, the CBD establishes a financial mechanism to support developing countries in implementing the Convention.[23] The financial mechanism is operated by the Global Environment Facility (GEF) under guidance of the Conference of the Parties (COP), and as indicated above, the incremental costs need to be agreed between the developing countries and the GEF. According to the latest report of the GEF to the CBD COP. "the GEF has provided about $2.3 billion in grants and leveraged about $5.36 billion in co-financing in support of about 790 biodiversity projects in more than 155 countries" (CBD 2009: 1). With respect to forest biodiversity, Christophersen et al. (2008: 7) add that "the GEF has supported 92 forest-related projects in 52 countries with € 247 million from its trust fund" and "generated € 959 million in co-financing ". The relation between the provision of financial resources and incentives for developing countries to comply with the CBD is stressed in CBD Article 20.4, which states that "the extent to which developing country parties will effectively implement their commitments under this Convention will depend on the effective implementation by developed country parties of their commitments related to financial resources and transfer of technology".[24] The GEF needs to establish whether the measures for which funding is sought are in conformity with the priorities determined by the COP. According to Birnie and Boyle (2002: 584), this means that "developing states are thus only free to decide their own environmental polices [sic] if they do not apply for funding", and that developing countries will only apply for funding if the benefits of funding outweigh the benefits of utilizing the resources according to the national priorities. The incentive is thus aimed at "compensating the developing states concerned for losses deriving from reorientation of their current economic uses of such biological resources as rain forests" (Birnie and Boyle 2002: 584).

A third set of incentives is created by the Convention's provisions on the *transfer of technology*. The Convention states that each Party undertakes to provide access for and transfer to other Parties of technologies relevant to achieve the objectives of the CBD.[25] The transfer to developing countries must be on "fair and most favourable terms". In case patents or other IPRs are involved, these need to be provided adequate and effective protection.[26] However, governments also must take measures to ensure that the private sector in developed countries provides access to technologies for government institutions and the private sector in developing countries.[27] The compromise reached in the CBD is subtle: it seems that IPRs "are to be respected but only insofar as they assist rather than hinder implementation of the Convention" (Birnie and Boyle 2002: 585). However, while in principle these provisions should facilitate the access to and transfer of technologies, matters regarding IPRs which already surfaced in the negotiations on the Convention have not been fully resolved.

Fourth, the CBD contains *reporting incentives*. The treaty contains a requirement to regularly report on measures taken to implement the treaty.[28] The deadlines for national reports are determined by the COP; while this initially happened in an ad hoc fashion, the reports are now to be submitted every four years. So far, Parties have been requested four national reports. Table 2.1 shows that the majority of CBD Parties have submitted their first three reports. While the deadline for the fourth report has passed,

[22] Art. 20.2 CBD.
[23] Art. 21 CBD.
[24] Art. 20.4 CBD.
[25] Art. 16.1 CBD.
[26] Art. 16.2 CBD.
[27] Art. 16.4 CBD.
[28] Art. 26 CBD.

it is too early to tell whether the same numbers will eventually be reached for the fourth national reports, as (developing as well as some developed) countries have experienced difficulties in meeting the deadline. Countries that have not submitted a first (or second or third) report are still allowed to submit the subsequent report. The Secretariat noted in its synthesis of the third national reports that the reporting in general has been unsatisfactory, although it has improved as compared to the first two reporting rounds. It attributes this improved reporting to financing through the GEF as well as improved communication between the Secretariat and CBD Parties (CBD 2007b: 8). The number of reports submitted one year after the 2009 deadline for the fourth national report (over 100) indicates that the rate of reporting is further improving since the third national report, for which the Secretariat indicated that 127 reports had been received after *two* years (CBD 2007b: 8).

To facilitate reporting, a common format is prepared by the CBD Secretariat for each reporting round. As noted by the COP, the fourth national reports are important in that they are to provide an indication of the progress towards the 2010 biodiversity targets (CBD 2006a: para. 3). In addition to national reports, Parties are also invited to submit thematic reports, including reports on forest ecosystems.

Table 2.1 National reporting under the CBD. [29]

Report #	Due Date	Submitted as of 25 April 2010 (nr. of CBD Parties)
First	1 January 1998	149
Second	15 May 2001	133
Third	15 May 2005	148
Fourth	29 March 2009	106

While the CBD thus provides various incentives for Parties to ensure the conservation and sustainable use of biodiversity, it is notable that the Convention does not include a formal compliance mechanism, thereby leaving much to the goodwill of its signatories (Freibauer 2009: 445), and the CBD's reporting and review systems. The Convention, however, provides for dispute settlement in case there are disputes concerning the interpretation or application of this Convention.[30] In the first place, a resolution needs to be achieved through negotiation. If that proves impossible, Parties can seek the use of good offices or mediation. If an agreement is still not reached by these means, then it may be possible that Parties seek arbitration or submit a dispute to the International Court of Justice. Birnie and Boyle (2002: 589) provide a pessimistic assessment of the dispute settlement provisions of the CBD: "it offers little or no assurance that unresolved matters of interpretation, or alleged excess of power by the [COP] or the financial mechanism can be settled by any third party process". Suffice it to say that no dispute has yet arisen for which it was necessary to seek recourse to this provision of the CBD.

[29] This table is based on the information available at http://www.cbd.int/nr4/ (last accessed 25 April 2010).

[30] Art. 27 and Annexes I and II CBD.

2.4 The main actors

2.4.1 Organizational arrangements

The main decision-making body of the CBD is its *Conference of the Parties (COP)*, which is to keep the implementation of the Convention under review.[31] To this end, it can review scientific and other advice provided by its subsidiary bodies; adopt protocols if necessary; adopt amendments to the Convention; establish new subsidiary bodies; and contact executive bodies of other conventions through the Secretariat. The final part of its mandate broadens this considerably by allowing the COP to "consider and undertake any additional action that may be required for the achievement of the purposes of this Convention in the light of experience gained in its operation".[32] In order to fulfil its tasks, the COP has adopted a great number of decisions on all kinds of topics related to the Convention. The COP meets regularly, so far mostly on a biannual basis. To date, the COP has met nine times, with the next meeting coming up in Nagoya, Japan, in October 2010.

The COP is supported by the *Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA)*, which consists of government representatives with relevant expertise.[33] The SBSTTA is responsible for, inter alia, providing scientific assessments of the state of biological diversity, preparing assessments on the effects of measures taken in accordance with the CBD, identifying technologies relating to the conservation and sustainable use of biodiversity, and means of promoting their development and transfer. The SBSTTA meets primarily in between the COP sessions, although some of its meetings have been held in conjunction. The output of the SBSTTA is primarily in the form of recommendations to the COP, which may be developed into COP decisions.

In addition to the SBSTTA, several *ad hoc open-ended working groups* have been created to deal with a variety of issues. Four such working groups are currently in place: 1) the Working Group on the Review of Implementation, established in 2002, which evaluates progress in implementing the CBD, its strategic plan, and the 2010 Biodiversity Target; 2) the Working Group on Access and Benefit Sharing, established in 2000, which is mandated to negotiate an international regime for the fair and equitable sharing of benefits arising out of the utilization of genetic resources; 3) the Working Group on Protected Areas, established in 2004, which is aimed at supporting and reviewing the progress in implementing the programme of work on protected areas; and 4) the Working Group on Article 8(j), established in 1998, with a view to enhancing the role of indigenous and local communities in the implementation of the Convention.

Another key actor established by the Convention itself is the *Secretariat of the CBD*. According to the Convention, the Secretariat's key tasks include arranging for and serving meetings of the COP, preparing reports on its execution, coordinating with other relevant bodies and, if needed, conclude administrative and contractual agreements with those bodies. In addition, the Secretariat is to carry out any other tasks as determined by the COP.[34]The Secretariat has taken its coordination function seriously. It has concluded over 100 memoranda of understanding or memoranda of cooperation with other treaty bodies, including the secretariats of other biodiversity-

[31] Art. 23.4 CBD.
[32] Ibid.
[33] Art. 25 CBD.
[34] Art. 24.1 CBD.

related conventions as well as the secretariats of the Rio Conventions (see below).[35] Interestingly, it appears that the CBD Secretariat has been able to exert some influence in the CBD process. According to Siebenhüner (2009: 284), the Secretariat "provides an example of a well-functioning environmentalist international bureaucracy that has developed significant influence on international negotiations and cooperation". The Secretariat proved to be an important mediator in negotiations on access and benefit sharing and biosafety, but was also instrumental in putting the ecosystem approach and the 2010 biodiversity targets on the agenda of the COP. Furthermore, the Secretariat assists by drafting COP decisions and SBSTTA recommendations.

Finally, although not an 'actor', the Clearing House Mechanism established in accordance with the Convention should be briefly mentioned here as part of the institutional arrangements.[36] The mechanism was initially aimed at improving access to key documentation about the CBD, but by now has a broad mandate which includes the promotion and facilitation of scientific and technological cooperation between countries on biodiversity-related issues.[37]

2.4.2 Other relevant actors

As in other multilateral environmental agreements, *non-governmental organizations (NGOs)* also play a key part in the CBD. Arts and Mack (2003), for instance, argue that environmental NGOs have been instrumental in ensuring the inclusion of the precautionary approach in the Cartagena Protocol. What should be noted here is that there is of course wide variation among ENGOs themselves (ENGOs), with various ENGOs specializing on certain topics. Organizations of indigenous and local communities also have an important role to play in ensuring that the provisions of the CBD relating to them are properly implemented. Various NGOs are (loosely) cooperating with each other through the CBD Alliance.[38] To facilitate participation of indigenous and local communities, a voluntary fund has been set up by the CBD Parties.

Birnie and Boyle (2002: 586) emphasize the role that NGOs play in ensuring compliance by providing expertise to and exerting pressure on government delegates. In the absence of intergovernmental enforcement procedures (e.g. inspection), monitoring of the implementation of the Convention by NGOs is an important factor, fostering the implementation by providing expertise and resources, and possible shaming of non-compliers provide important tools to enhance compliance. At the national level, NGOs can play a role, for example, in the development of NBSAPs (Herkenrath 2002).

Another actor group active in the CBD is the *private sector*, which in the literature is primarily discussed in the context of the discussions on biosafety and ABS (Clapp 2007; Buriel 2008; Bled 2009a; 2009b). These studies show that small but strong business lobbying groups are active in the biodiversity negotiations, but that these are formed primarily in response to particular issues, such as the negotiations on the Cartagena Protocol, where biotechnology companies producing genetically modified food had an interest in influencing the negotiations, or the discussions on ABS, where for instance pharmaceutical companies have an important stake in the outcomes. The studies show that, as is the case with ENGOs, there is a wide diversity in the (sectoral)

[35] An overview of the memoranda can be obtained through http://www.cbd.int/agreements/.
[36] Art. 18.3 CBD.
[37] For more information, see http://www.cbd.int/chm/intro/ (last accessed 13 April 2010).
[38] See http://www.cbdalliance.org/.

background of participating businesses. What is also clear is that business participation primarily involves business associated with developed countries, in particular North America (Bled 2009a).

2.5 Forest policies

Forests form an important component of the world's biological diversity and also play a vital role in maintaining global biodiversity in general. Various provisions and decisions of the CBD are therefore of relevance for forests. These include the decisions on protected areas; guidance to the financial mechanism; incentive measures; and biodiversity and climate change. It should thus be noted that although this section discusses the key CBD COP decisions on forest biodiversity, other decisions are also of relevance. According to Le Prestre (2002b: 276), the CBD has had difficulties assuming a central role in global forest governance, even though Parties have repeatedly acknowledged that this issue is covered by the CBD's mandate. Still, as will be shown in this section, the CBD has slowly but surely expanded its activities in this area.

The CBD's initial activities on forest biodiversity were partly in response to the Intergovernmental Panel on Forests (IPF), which was established in 1995. At the second COP in that same year, the Parties to the CBD issued a statement to the IPF, in which links were established between the terms of reference of the IPF and forest-relevant provisions in the CBD, and gaps in the terms of reference were identified (CBD 1995b: Annex). In this decision, the COP also requested the CBD Secretariat to produce a background document in order to determine whether further input to the IPF was needed (CBD 1995b: para. 2(b)). Following the report by the Secretariat, the third COP in 1996 provided further input to the IPF (CBD 1997: Annex). It also requested the Secretariat to develop a work programme for forest biological diversity. The initial focus of the work programme was to be on research and the development of technologies relevant for the conservation and sustainable use of forest biodiversity (CBD 1997: para. 6). The COP also asked the SBSTTA to start considering forest biodiversity, focusing in particular on criteria and indicators for sustainable forest management, and assessments of the human influences on forest biodiversity (CBD 1997: para. 10). Following consideration by the SBSTTA, a first, three-year work programme was endorsed at the fourth COP (CBD 1998: para. 1 and Annex). Parties were called upon to implement the work programme, while the GEF was asked to provide financial support to this end (CBD 1998: para. 6). In this decision, the CBD Secretariat was also asked for the first time to liaise with secretariats of the other Rio Conventions, given the "the potential impact of afforestation, reforestation, forest degradation and deforestation on forest biological diversity and on other ecosystems" (CBD 1998: para. 9).

The main development at the fifth COP in 2000 was the establishment of an Ad Hoc Technical Expert Group (AHTEG) on forest biological diversity. The AHTEG's terms of reference included providing advice on the state of forest biodiversity and suggesting priority actions for the conservation and sustainable use thereof (CBD 2000a: para. 4 and Annex I).

Whereas the scope of the first work programme on forest biodiversity adopted by the CBD was rather narrow, an expanded work programme was adopted at the sixth COP in 2002 (CBD 2002: para. 10 and Annex). While the programme does not include quantified, time-bound targets, it lists 3 overarching elements and 12 goals (see Table 2.2). Under each goal, 27 specific objectives and around 130 activities are listed. These activities are not mandatory for all Parties, but are sometimes only relevant for a

number of Parties. In general, Parties are requested to incorporate the activities in their national programmes and plans (CBD 2002: para. 28).

Table 2.2 Programme elements and associated goals of the CBD's expanded work programme of work on forest biological diversity (CBD 2002).

Programme element 1 - Conservation, sustainable use and benefit sharing	
1	To apply the ecosystem approach to the management of all types of forests
2	To reduce the threats and mitigate the impacts of threatening processes on forest biological diversity
3	To protect, recover and restore forest biological diversity
4	To promote the sustainable use of forest biological diversity
5	Access and benefit sharing of forest genetic resources
Programme element 2 – Institutional and socio-economic enabling environment	
1	Enhance the institutional enabling environment
2	Address socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity
3	Increase public education, participation, and awareness
Programme element 3 – Knowledge, assessment and monitoring	
1	To characterize and to analyse from forest ecosystem to global scale and develop general classification of forests on various scales in order to improve the assessment of status and trends of forest biological diversity
2	Improve knowledge on and methods for the assessment of the status and trends of forest biological diversity, based on available information
3	Improve understanding of the role of forest biodiversity and ecosystem functioning
4	Improve the infrastructure for data and information management for accurate assessment and monitoring of global forest biological diversity

The expanded programme of work was aimed at more practical action at all levels as compared to the initial programme (Humphreys 2006: 192). The decision launching the expanded work programme also requested the CBD Secretariat to initiate a number of activities, including activities aimed at clarifying the concept of the ecosystem approach in the context of sustainable forest management; enhancing collaboration with other international bodies; developing case studies on the relation between enforcement of forest laws and the effects on forest biological diversity; and developing a report on the sustainable use and conservation of forest resources (CBD 2002: para. 19). The decision also identifies various avenues for further cooperation with other international bodies, including the UNFCCC, for which it identifies research and monitoring of the impacts of climate change on forest biodiversity as a future subject of collaboration (CBD 2002: para. 40).

At the eighth COP in 2006, the Secretariat was asked to start with an in-depth assessment of implementation of the expanded programme of work (CBD 2006b: Part C, para. 1 and Annex). This review was completed in 2007 (CBD 2007a), and discussed at the ninth COP in 2008. While the review deemed the programme of work a "valuable tool", it identified a number of barriers to its effective implementation, including insufficient data, and a lack of capacity, which has implications for enforcement. The

review draws attention to deforestation and forest degradation as important drivers of forest biodiversity loss, and urges Parties to incorporate climate change in their national strategies and programmes (CBD 2007a). In response to the review, the COP recognized that there is an "urgent need to strengthen implementation of the programme of work on forest biodiversity to reach the 2010 biodiversity target and the 2010 target of the World Summit on Sustainable Development, through sustainable forest management and the ecosystem approach" (CBD 2008a: Preamble). The decision also provided suggestions on how to deal with the issue of genetically modified trees, reaffirming the precautionary approach (CBD 2008a: para. 1(r)). Furthermore, the decision explicitly calls for cooperation with the UNFCCC Secretariat and the World Bank on the issue of REDD (CBD 2008a: para. 2(b)).

Overall, it can be seen that the depth and scope of the CBD's activities in the area of forest biodiversity have significantly expanded, especially after the launch of the expanded programme of work in 2002. While the in-depth review of the programme of work reveals that Parties have started with its implementation, it is another question whether it is effective in achieving its goals—or the broader goals of the CBD—given that it complements a range of other international initiatives in the area of forest governance. Furthermore, as Freibauer (2009: 455) notes, "there are no criteria to substantiate, quantify or compare progress among countries", making it all the more difficult to provide a proper assessment of its effectiveness.[39]

2.6 Interlinkages with the climate regime

2.6.1 Overview of interlinkages

Various contributions have pointed to the numerous and complex material interlinkages[40] between the causes and consequences of climate change and the conservation and sustainable use of biological diversity (IPCC 2002; CBD Secretariat 2003; 2009). The first important interlinkage is that climate change is a major threat to the preservation of biodiversity and already has negative impacts on a range of ecosystems and species. Second, ecosystems with high biological diversity are more resilient to climate change and climate variability than impoverished ecosystems, and are generally better able to adapt naturally to climate change (CBD Secretariat 2003: 78). Third, certain ecosystems form either net carbon sinks or sources of emissions. For instance, young, growing trees act as carbon sinks by absorbing carbon dioxide from the atmosphere. However, most carbon dioxide is stored in old-growth forests, which form vast reservoirs of carbon over a long period. When forests or harvested wood products are burned or decompose, the biomass loses its function as a sink and becomes a source of carbon (CBD Secretariat 2003: 48). Avoiding deforestation and forest degradation, as well as afforestation and reforestation, therefore have significant potential for climate change mitigation, although the impacts of afforestation and reforestation on biodiversity may be positive, neutral, or negative (CBD Secretariat 2003: 58).

[39] This conclusion also holds for studies of the effectiveness of the CBD in general (see Le Prestre 2002a).

[40] Material interlinkages are "inherent structural connections between policy domains that are largely independent of the rules and procedures of political institutions in the domain" (van Asselt et al. 2005: 257).

Given these material interlinkages, it is not surprising that there are various institutional interlinkages[41] between the CBD and the climate regime as well. The majority of studies of the institutional interlinkages between the UNFCCC and the CBD have focused on the biodiversity implications of the implementation of the Kyoto Protocol, particularly following decisions on land use, land use-change and forestry, and the use of carbon sinks in the Protocol's Clean Development Mechanism (CDM) (Bäckstrand and Lövbrand 2006; Jacquemont and Caparrós 2002; Pontecorvo 1999; Sagemüller 2006; Schwartz 2006; Wolfrum and Matz 2003: 79-93). The Kyoto Protocol is largely silent about the biodiversity impacts of sinks activities, although it calls on its Parties to implement policies and measures, including the protection and enhancement of sinks and reservoirs, "taking into account its commitments under relevant international environmental agreements".[42] Although this provision does not state *which* agreements need to be taken into account, it is reasonable to assume that, given the role of forests as carbon sinks, the CBD can be considered 'relevant'.

Including sinks in emissions accounting, and especially in the CDM has been a controversial issue since the 1990s. Whereas the European Union, supported by various developing countries, sought to take a moral higher ground by opposing their inclusion in the CDM, the US, supported by Latin American countries saw the inclusion of sinks as a pragmatic solution for climate mitigation (Boyd et al. 2006: 106). After an initial failure to bring the opposing viewpoints together at the sixth Conference of the Parties in The Hague in 2000, Parties managed to reach a compromise one year later. This compromise entails that, with some limitations, forestry projects can be eligible for credits under the CDM. Critics have argued that the rules on CDM sinks do not sufficiently safeguard biodiversity concerns, and could frustrate the objectives of the CBD. The main concerns raised in this regard are that current rules allow for projects which result in destructive large-scale, monoculture plantations, a lack of protection for existing old-growth forests, and the use of invasive alien species and GMOs (Meinshausen and Hare 2003). Notwithstanding these criticisms, one of the general principles governing forestry activities requires that "the implementation of land use, land-use change and forestry activities contributes to the conservation of biodiversity and sustainable use of natural resources" (UNFCCC 2006a: Annex, § 1(e)). This principle has been elaborated at the ninth Conference of the Parties to the climate convention in 2003 for forestry projects under the CDM (UNFCCC 2006b). In these negotiations, the EU, together with the Alliance of Small Island States, sought to accommodate biodiversity concerns through including sustainable development criteria, but found itself opposed by many developing countries as well as Canada (Boyd et al. 2006: 105).[43] The resulting rules require an analysis of socio-economic and environmental impacts of forestry projects, but do not go as far as the EU originally proposed. First, the decision does not explicitly refer to relevant biodiversity-related agreements, including the CBD.[44] Second, the decision's rules on socio-economic and environmental impact assessment of CDM projects are rather ambiguous, leaving discretion to the host country and project participants (UNFCCC 2004a: Annex, § 12 (c)). Third, the decision does not require that projects be consistent with national sustainable development plans. Finally, the decision also does not expressly exclude the use of invasive alien species and GMOs (see, in particular, Schwartz 2006).

[41] Institutional interlinkages are "connections between societal institutions (…) as well as linkages between different organizations" (van Asselt et al. 2005: 257).

[42] Art. 2.1 (a) (ii) Kyoto Protocol.

[43] By this time, the US was no longer involved in the formal negotiations, given that it had turned its back on Kyoto in 2001.

[44] UNFCCC (2004: recital) refers merely to "international agreements that may apply to afforestation and reforestation project activities".

In recent years, UNFCCC discussions on the role of forests in climate change mitigation activities have mainly taken place under the heading of "reduced emissions from deforestation and degradation" (REDD). Through a REDD mechanism, countries with tropical forests could be compensated for their efforts to reduce deforestation and forest degradation. However, there are concerns that such efforts might be concentrated on the forested areas which are cheapest to protect, rather than the areas identified as biodiversity "hotspots" (Grainger et al. 2009). While the idea of creating incentives for reducing deforestation in developing countries is hardly contested, there is disagreement about the design of a REDD mechanism, with one of the key questions being whether such a mechanism should be market- or fund-based or a combination thereof (Stockwell et al. 2009). Given that the design of a REDD mechanism still needs to be elaborated, it remains to be seen how biodiversity concerns are integrated in the future climate regime.

2.6.2 Policy response to interlinkages

The brief discussion above shows that there are developments in the climate regime with potentially important implications for biodiversity, and that the rules developed under the Kyoto Protocol only have paid lip service to biodiversity protection and the CBD (see also Humphreys 2006: 213). In contrast, Parties to the CBD have actively sought to manage the interlinkages between the regimes, as will be described below.

First, a number of decisions have been adopted by the Conference of the Parties to the CBD on biodiversity and climate change. These decisions have sought to avoid conflicts on various biodiversity-related issues, and have been instrumental in highlighting biodiversity concerns in UNFCCC decisions (Yamin and Depledge 2004: 523-524). One of the first decisions highlighting the link between the two regimes was adopted when the discussion on sinks in the climate regime was high on the agenda. The decision "urges" the Parties to the UNFCCC "to ensure that future activities of the [UNFCCC], including forest and carbon sequestration, are consistent with and supportive of the conservation and sustainable use of biological diversity", and asked the SBTTA to provide scientific advice on how to integrate biodiversity considerations in the implementation of the climate treaties (CBD 2000a: paras. 16 and 18). A separate decision on biodiversity and climate change was adopted at the seventh COP in 2004 (CBD 2004b), mainly responding to a previously published report by an AHTEG on biodiversity and climate change (CBD Secretariat 2003; see below). The decision is carefully formulated (using words like "invites", "notes", and "requests", rather than "emphasizes" and "urges"), and takes the view that there are opportunities for synergies between the treaties (CBD 2004: para. 7). The decision points to a CBD-specific approach to addressing the interlinkages between the CBD and the climate treaties, by noting that the ecosystem approach "could facilitate the formulation of climate change mitigation and adaptation projects that also contribute to biodiversity conservation and sustainable use at the national level" (CBD 2004b: para. 8). The decision also requests the SBSTTA to develop further guidance for promoting synergies, and invites the UNFCCC (through the Joint Liaison Group; see below) to collaborate to this end (CBD 2004b: para. 14-15). Another key decision on biodiversity and climate change was adopted at the eighth COP. The decision calls on the CBD Parties and other countries to integrate biodiversity considerations into their climate policies, and highlights the need to develop tools for biodiversity protection activities that could enhance adaptation to climate change (CBD 2006c: para. 1-2). A CBD-specific issue raised in this decision is the need to involve indigenous and local communities in undertaking adaptation activities (CBD 2006c: para. 3). The decision also asks the SBSTTA to develop guidance on integrating climate change impacts and

responses in the programmes of work of the CBD, and asks the Secretariat to identify options for enhanced collaboration among the three Rio Conventions (CBD 2006c: para. 8-9; see below). The ninth COP also put the interlinkages between climate change and biodiversity on the agenda. In a decision, the COP decided that climate change considerations (i.e. the impacts of climate change itself, as well as the impacts of mitigation and adaptation activities) should be integrated in future programmes of work, taking into account, *inter alia*, the ecosystem approach and precautionary approach (CBD 2008b: para. A.1). Parties are also requested to consider climate change in their implementation of the CBD, for instance, in their national biodiversity strategies and action plans (CBD 2008b: para. A.4). The COP further instructed the CBD Secretariat to identify options for mutually supportive activities among the Rio Conventions, keeping in mind the different mandates of the treaties as well as the need to save costs and avoid duplication of efforts (CBD 2008b: para. B.1). Parties are also invited to implement various activities identified in the decision with a view to promoting synergies among the Rio Conventions (CBD 2008b: para. B.8; see Box 2.2).

Box 2.2 Indicative list of activities to promote synergies among the Rio Conventions (CBD 2008b: Annex).

1. **Collaboration among national focal points, including:**
   - Establishing coordinating committee
   - Coordination while forming negotiation positions
2. **Cooperation on national level planning, including:**
   - Reviewing and revising plans and policies when necessary
   - Raising awareness among policy-makers and NGOs
3. **Collaboration at the level of convention bodies and secretariats through the JLG**
4. **Technology transfer, including:**
   - Impact assessments of technologies
   - Identification of technologies of joint interest
5. **Forests and climate change. Including:**
   - Integrating biodiversity concerns in forest sector planning
   - Involve different national focal points on discussions of broader interest, including REDD
6. **Climate change adaptation, including:**
   - Evaluating and enhancing integration of biodiversity and desertification considerations in adaptation planning
   - Identify areas at risk of climate change, and experiencing biodiversity loss
7. **Capacity building**
8. **Research and monitoring/systematic observation, including:**
   - Research on the impacts of climate change on biodiversity and desertification
9. **Information exchange and outreach, including:**
   - Developing a common pool of experts
10. **Harmonized reporting, including:**
    - Sharing databases
    - Collaborating while drafting reports

Third, the CBD Parties have established several ad hoc technical expert groups in order to provide scientific and technical advice on issues on the intersection of climate change and biodiversity. The first AHTEG on biological diversity and climate change delivered its report in 2003 (CBD Secretariat 2003). It provided a broad overview of biodiversity-climate change linkages, discussed the observed and projected impacts of climate change on biodiversity, as well as the effects of climate change mitigation and adaptation options. It also identified options for enhancing synergies between the different treaties on the ground. With regard to forest management, it noted that while "[af]forestation and reforestation can have positive, neutral, or negative impacts on biodiversity" (…) "[s]lowing deforestation and forest degradation can provide substantial biodiversity benefits in addition to mitigating greenhouse gas emissions and preserving ecological services" (CBD Secretariat 2003: 4-5). The second AHTEG on biodiversity and climate change released a report in 2009 (CBD Secretariat 2009). The report provides an update of the work of the previous AHTEG, while also zooming in on several issues in particular, including the design of REDD.

While these various initiatives have been important in the sense of creating awareness of climate-biodiversity interlinkages, synthesizing research on this issue, and fostering cooperation between actors involved in both regimes, they have so far failed to address the tensions about the use of sinks in climate change mitigation activities. However, for the design of a REDD mechanism, they may turn out to be useful. Rather than responding to mechanisms agreed upon by Parties in the climate regime, CBD Parties (and other actors such as the Secretariat) may be influential in ensuring that biodiversity considerations are integrated in the design of a REDD mechanism while such an instrument is still under negotiation.

2.6.3 Discussion

It can be seen that the climate regime has dominated rule development on aspects which concern both the climate and biodiversity regimes, primarily through its decisions on sinks in general and sinks in the CDM. The inclusion of sinks in the CDM is inextricably intertwined with the emergence of flexibility mechanisms in the climate regime in general. In the early 1990s, it was primarily the United States that proposed the use of emissions trading in international climate policy, while the EU was still heavily opposed to the use of market mechanisms. However, in the negotiations on the Kyoto Protocol, it became clear that the US would only accept binding targets if they were combined with flexibility mechanisms to lower the costs of compliance (van Asselt and Gupta 2009: 334-335). The position of the US has also been argued to be influential for the outcomes of the CDM sinks discussion, despite the fact that the US was no longer on board of the Kyoto Protocol in 2003 (Boyd et al. 2006: 107). Referring to the US and its negotiating partners in the climate regime (Japan, Canada, Australia, New Zealand), Bäckstrand and Lövbrand (2006: 60-61) identify flexibility, cost-effectiveness, and a "seductive narrative of "maximized synergies"" as the key elements of the "legitimizing discourse" for the inclusion of sinks in the CDM. Northern countries favouring the inclusion of sinks in the CDM have emphasized the cost-saving potential of expanding the scope of the mechanism, while countries in the South have highlighted the various (economic and non-economic) co-benefits, including financial and technology transfers.

However, such an explanation does not sketch the complete picture with respect to the relation between the climate regime and the CBD. In addition, we need to examine what has driven different actors to push for the consideration of biodiversity concerns in the climate regime, why the CBD Parties have sought to manage the interlinkages in various ways, and why these efforts so far have had little effect. Bäckstrand and Lövbrand (2006: 64-65) argue how the concerns expressed about sinks are part of a "critical discourse" that contests the dominant discourses that have legitimized and operationalized sinks in the CDM. This critical discourse not only emphasizes the potentially negative effects on biodiversity and ecosystem protection, but also draws attention to the social and equity aspects of including sinks in the CDM—as well as the use of market-based mechanisms more generally. This discourse, which found support among NGOs as well as some developing countries, provides an explanation for the requirement to conduct a socio-economic and environmental analysis of CDM forestry projects (Bäckstrand and Lövbrand 2006: 69). It also provides an explanation for the push to include biodiversity considerations in a REDD mechanism by NGOs, scientists and a number of Parties to the UNFCCC (e.g. Grainger et al. 2009).

It is more difficult to answer the question about what has driven the efforts of CBD Parties to address the interlinkages between climate change and biodiversity. In other words, what lies behind the rhetorical calls for mutually supportive implementation

that can be found in the various CBD decisions? One could speculate that the CBD Parties seek to 'hitch a ride' in a time where climate change is high on the agenda of policy-makers worldwide. Drawing attention to the overlapping issues could lead to prioritization—and possibly funding—of climate change mitigation and adaptation activities with positive effects on biodiversity protection. It could also be a proactive, self-protective response, given that the more powerful and influential climate regime is intruding on issues relevant to the CBD.

Finally, there are several explanations for why the management efforts by CBD Parties have yielded little effect. First and foremost, any effort by actors in one regime to influence rule development in another will be limited by the extent to which memberships are congruent and, related to that, the mandates for the respective administrative bodies. In this case, an important barrier is that the US is a Party to the UNFCCC, but has not ratified the CBD. A broad mandate for the UNFCCC Secretariat to cooperate with the CBD Secretariat could give the perception that national sovereignty is eroded by 'importing' concepts or rules from the CBD (cf. Wolfrum and Matz 2003: 163). Second, efforts to incorporate biodiversity concerns in the CDM in essence seek to alter the mechanism's market-based nature. While it is clear that biodiversity concerns are not completely ignored in the climate regime, it remains to be seen to what extent Parties in the climate regime are ready to give biodiversity conservation a more prominent place.

2.7 Lessons learned

The brief analysis of the CBD in this chapter points to a number of lessons that can be learned for forest governance and the efforts to reduce deforestation and forest degradation in the climate regime.

First, the CBD places emphasis on a number of key concepts, which do not always feature in other regimes, including the climate regime, but are nevertheless of importance in forest governance. Notably, an ecosystem approach to carbon sinks could alter the way climate policies are designed, by emphasizing decentralization, the impacts of policies on neighbouring ecosystems, the use of economic incentives, and the participation of all relevant societal actors. Furthermore, the CBD—as well as other international instruments—emphasize the rights and role of indigenous and local communities in the protection of biodiversity, another aspect that will be important to integrate in the design of a REDD mechanism

Second, the CBD contains a number of important incentives to induce compliance by Parties, including the setting of (non-binding) targets, financial and technology transfer incentives, and reporting incentives. However, the CBD does not have a strong compliance regime. Instead, it is very much dependent on Parties' goodwill, its monitoring and reporting procedures, and activities by NGOs. This may be one of the reasons why evaluations of the effectiveness of the CBD have so far been not very positive (e.g. Le Prestre 2002a; 2002b), and why compliance with reporting requirements so far has been disappointing (although improving over time).

Third, the CBD has experienced difficulties in establishing itself as a central instrument in forest governance, especially due to the various international initiatives in this field. Nevertheless, the CBD has managed to incrementally expand its activities on forest biological diversity, in particular through its expanded programme of work on forest biological diversity. This shows that an international instrument can deal with forests comprehensively, but that progress will likely be slow. Given the fragmented nature of global forest governance, the effectiveness of the CBD's activities on forests is still

difficult to assess. In other words, the CBD's efforts need to be examined in conjunction with the activities of other international bodies and organizations.

Fourth, the objectives of the UNFCCC and Kyoto Protocol on the one hand, and the CBD on the other, are in principle synergetic, and there is ample opportunity for implementing the various treaties with synergetic effects. However, decisions taken in the implementation stage of the Kyoto Protocol may lead to activities with negative impacts on achieving the goals of the CBD. This is most notable in the discussion on sinks accounting and the use of sinks in the CDM. CBD Parties have acknowledged this risk (as well as the positive overlaps between the treaties), and have sought to cooperate with UNFCCC Parties on this issue, primarily through the CBD Secretariat. In their decisions they highlighted CBD-specific issues, such as the ecosystem approach, and the position of indigenous and local communities. The analysis of interlinkages between the CBD and the climate regime provides an indication that it may be difficult to integrate biodiversity concerns in a REDD mechanism. However, the proactive engagement of actors from the biodiversity regime (especially the CBD Secretariat) in the REDD discussions may contribute to the inclusion of biodiversity considerations in the future climate regime.

3 The Global Environment Facility, Forests and Climate Change

3.1 Introduction

This chapter focuses on the Global Environment Facility (GEF), one of the primary financial institutions for tackling global environmental problems. The GEF came into being in 1991 as a pilot programme of the World Bank. Three years later, in 1994, it was moved out of the World Bank system and became a separate, permanent institution although the World Bank remains the main Trustee of the World Bank Trust Fund. The GEF's mandate is to provide grants and concessional funding to cover the incremental cost for projects that yield global environmental benefits. The GEF is also the financial mechanism for a number of multilateral environmental agreements, including the 1992 Convention on Biological Diversity (CBD), the 1992 United Nations Framework Convention on Climate Change (UNFCCC) and its 1997 Kyoto Protocol. Under its focal areas biodiversity, climate change and, more recently, land degradation, it has provided funding for projects in the area of sustainable forest management. Of the several forest functions covered by Ruis (2001), the GEF is aimed at forest conservation and biodiversity, carbon sinks and sequestration, and soil protection and erosion control. The importance of GEF funding for international environmental governance, especially in the area of biodiversity protection, has been emphasized by various authors (e.g. Birnie et al. 2009: 83). As such, and as one of the main financing institutions for global environmental issues, how the GEF has functioned and how it has dealt with forests can provide a number of lessons to be learned for forest governance and efforts to reduce deforestation and forest degradation in the climate regime (cf. Rosendal 2009).

Against this background, this chapter aims to provide an overview of the GEF, its relevance to forests, and the interlinkages between the GEF and the climate regime with regard to forests. The chapter is structured as follows. Section 2 first discusses briefly the history of the GEF, while Section 3 describes some of its key features, including an overview of the incentives and disincentives it provides. Section 4 then continues to discuss the main actors involved in the GEF, including the organizational arrangements provided for. Section 5 examines the GEF's relevance for, and activities on forests. Section 6 then discusses the interlinkages between the GEF and the climate regime. Finally, Section 7 provides some of the lessons learned from this case study.

3.2 History

At the end of the 1980s there was an emerging consensus that tackling global environmental problems such as ozone depletion and climate change would need the engagement of developing countries, and that such engagement would need to be accompanied by a funding mechanism to support those countries. Traces of this idea could already be found in the 1987 report by the World Commission on Environment and Development), which "inspired and legitimized the proposals for environmental financing mechanisms that followed" (Sjöberg 1994: 4). Simultaneously, internal discussions took place within the World Bank, where several people, including in the newly created Environment Department, became convinced that the Bank had a role to play in environmental funding. Part of the motivation of the World Bank can also be attributed to the critique it received in the 1980s about its environmental record. This was followed by more political interest, and a range of proposals by various actors.

Some of these proposals pointed to the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP) as potential venues for hosting an international environmental fund, but there were question marks about their institutional capacity to carry out such a function. In September 1989, the French government tabled a proposal ahead of a joint ministerial meeting of the World Bank Group and the International Monetary Fund (IMF), in which it envisaged an important role for the Bank in international environmental funding. This proposal, which was also supported by the German government, was not very specific, but turned out to be very influential, primarily because it was accompanied by a financial pledge of about US$100 million (see, for more details, Boisson de Chazournes 1999; 2005; Broughton 2009; Gupta 1995; Jordan 1995; Silard 1995; Sjöberg 1994; Streck 2001; Werksman 1995).

The French proposal stimulated further discussions within the World Bank. A 1990 working paper by the Bank outlined some of the key elements of the new funding instrument. First, it proposed an instrument for 'global' environmental problems. This suggestion was supported by both developed countries, which were eager to act on these emerging issues, and developing countries, who argued that the new focus on international environmental problems should be accompanied by funding additional to existing financial flows (Broughton 2009). Second, it proposed four focal areas: ozone depletion, climate change, biodiversity and international water resources. Third, the paper suggested the tripartite governance structure that was eventually adopted, involving not only the Bank but also UNDP and UNEP. This suggestion accommodated various concerns: it included UN branches, it used existing organizations, and it accounted for both environmental and development issues. Fourth, the working paper suggested establishing a new facility on a pilot basis (Sjöberg 1994). Negotiations involving donors, recipients and other stakeholders took place in 1990, leading to an agreement by November of that year. Following initial pledges of US$860 million by developed countries to a Global Environmental Trust Fund, the establishment of the fund was supported by the Board of Executive Directors of the World Bank, as well as the Governing Councils of both UNDP and UNEP in 1991, resulting in the formal start of the GEF (Streck 2001).

In its three-year pilot phase, the GEF was a "loosely structured, action-oriented entity that was created without entailing a new bureaucracy" (Streck 2001: 74). It was not clear from the start how this structure should evolve. Not all developed countries shared the same view on the institutional embedding of the GEF. Whereas some European countries saw the GEF as a possible precursor to a new international organization, the United States envisaged that the World Bank would eventually take over the GEF's functions (Boisson de Chazournes 2005). While the World Bank played an important role in the GEF's functioning in the pilot phase,[45] it received criticism from NGOs who felt excluded from the decision-making process and developing countries who felt that the GEF imposed a new form of conditionality and were critical of the concept of incremental costs (Sjöberg 1999; Streck 2001; Gupta 1995). Given this criticism, but also given struggles between the implementing agencies as well as broader political developments in the context of the 1992 United Nations Conference on Environment and Development (UNCED), it became clear that the loose governance structure that was agreed upon in 1991 was untenable in the longer term (Sjöberg 1999).

[45] The World Bank was the Trustee of the Global Environmental Trust Fund, the administrator responsible for the GEF's day-to-day business, and the implementing agency responsible for 70% of the funds (Streck 2001).

Restructuring the GEF entailed entering into politically sensitive discussions about whether it should and how it could function as the funding mechanism of the new global conventions that were being negotiated at the Rio Summit. As Sjöberg (1999: 19) indicates, "[w]ithout the endorsement of the conventions, the development of a post-pilot GEF would be seriously hampered". Donor countries wanted to avoid a situation where the proliferation of new multilateral environmental agreements would lead to a similar rise in new environmental funds, whereas developing countries were rather in favour of creating new green funds that were provided by a funding agency independent of the World Bank. The negotiations also again raised questions about the institutional embedding: whereas developing countries wanted to see the GEF more closely related to the UN system, developed countries were keen to link it to the Bretton Woods institutions (Streck 2001, Gupta 1995; 1997). Given developed country opposition to the establishment of new environmental funds, developing countries came to accept that the GEF would function as the financial mechanism of the newly agreed UNFCCC and CBD in 1992, under the condition that the mechanism would be guided by the respective Conferences of the Parties (COPs), and allow for a more transparent and participatory decision-making process (Broughton 2009). After a series of protracted negotiations, countries eventually managed to come to an agreement on the Instrument for the Establishment of the Restructured Global Environment Facility.[46] The GEF Instrument not only formalized the GEF's relation with the UNFCCC and CBD, it also revised its governance structure, envisaging a less dominant role for the World Bank, and allowed NGOs observer status (Broughton 2009).

GEF funding for four-year periods is provided by donor countries in a 'replenishment' process. The first replenishment was completed with the agreement on the GEF Instrument in 1994. Three subsequent rounds have been completed since, with the fifth replenishment currently underway (Table 3.1). In the early 2000s, the GEF expanded its mandate to desertification and persistent organic pollutants. Furthermore, the facility became the entity responsible for administering two of the three new climate change funds agreed upon in Marrakech in 2001: the Least-Developed Countries Fund and the Special Climate Change Fund.

Table 3.1 The GEF replenishment processes (Broughton 2009; Smyth 2009).

Replenishment	Years negotiated	Amount pledged	Replenishment period
First	1992-1994	US$ 2 billion	1 July 1994 – 30 June 1998
Second	1997-1998	US$ 2.75 billion	1 July 1998 – 30 June 2002
Third	2000-2002	US$ 2.97 billion	1 July 2002 – 6 February 2007
Fourth	2005-2006	US$ 3.13 billion	7 February 2007 – 30 June 2010
Fifth	2008-2010	US$ 4.25 billion[47]	1 July 2010 – 30 June 2015

[46] Geneva, 16 March 1994, 33 ILM 1273 (1994). For the latest version of the Instrument establishing the GEF, see GEF (2008a).

[47] See http://thegef.org/gef/node/3010 (last accessed 24 July 2010).

The most notable development during the fourth replenishment was the adoption of the controversial Resource Allocation Framework (RAF), which resulted in an allocation of funds "based on global environmental priorities and country capacity, policies and practices relevant to successful implementation of GEF projects" (GEF 2005a: 1). Performance-based allocation was one of the major requirements for continued support from the United States, but it also raised a number of concerns. While the RAF was adopted, a critical review led to the adoption of a revised allocation framework for the fifth replenishment cycle in 2009 (see below)

3.3 Key features

3.3.1 Objectives

According to the most recent version of the Instrument for the Establishment of the Restructured GEF, the GEF is to serve "as a mechanism for international cooperation for the purpose of providing new and additional grant and concessional funding to meet the agreed incremental costs of measures to achieve agreed global environmental benefits" in the areas of biological diversity; climate change; international waters; land degradation, primarily desertification and deforestation; ozone layer depletion; and persistent organic pollutants (GEF 2008a: para. 2). The substantive scope of the GEF also includes chemicals management and "other relevant activities under Agenda 21" as long as they result in global environmental benefits in the focal areas (GEF 2008: para. 3). The activities of the GEF need to be cost-effective, and its funding needs to target projects and programmes that are country-driven and based on national priorities (GEF 2008a: para. 4). The GEF's mandate can be interpreted to include both the pursuit of global environmental benefits, and catalyzing environmental action by incorporating global environmental concerns in projects that otherwise would not have done so; by encouraging cofinancing; and by financing innovative projects (Broughton 2009).

The GEF's operations are guided by a general operational strategy, which includes operational principles and strategic considerations for all GEF activities (GEF 1995). Strategies and strategic programming documents are developed for each focal area separately, as well as for the cross-cutting areas (GEF 2007a). Up to the fourth replenishment cycle, the GEF worked with operational programmes, which provided a "conceptual and planning framework for the design, implementation, and coordination of a set of projects to achieve a global environmental objective in a particular focal area" (GEF 1995: 7). The operational programmes are now replaced by strategic programmes.

3.3.2 Concepts

Perhaps the penultimate concept introduced and propagated by the GEF is that of *incremental costs*. The GEF initially defined 'incremental costs' as the "extra costs incurred in the process of redesigning an activity vis-à-vis a baseline plane, which is focussed on achieving national benefits, in order to address global environmental concerns" (Streck 2001: 73). Labatte defines it as "the difference in differences between benefits and costs in an existing (baseline) scenario and a counterfactual one that achieves global environmental benefits", but notes that this simple definition as applied by the GEF "ill-serves the dual objective of well designed interventions and alignment of interests between developed and developing countries" (Labatte 2008:

218, 221). This was also counter-productive since it reduced the 'ownership' of the project by the developing country partner (Gupta 1997).

Acknowledging that there is confusion about the precise meaning of the concept and its practical applicability, the GEF Council approved operational guidelines for applying the incremental cost principle in 2007 (GEF 2007b). The guidelines outline five steps through which the concept can be applied to project proposals:

1. Determining the environmental problem and the business-as-usual scenario: this includes a quantitative and qualitative assessment of what would happen without the GEF.
2. Identifying the global environmental benefits: this includes an assessment of the fit with the GEF's focal areas.
3. Reasoning the incremental costs and the role of the GEF: this entails an explanation of the value added by the GEF.
4. Developing a results framework: this includes identifying and negotiating the objectives and expected outcomes of a project, including indicators.
5. Negotiating the role of co-financing: this includes providing an indication of the level of cofinancing.

To some extent, the operational guidelines address criticisms raised against the application of the concept by the GEF. However, some of the procedural rigidity warned against by Labatte (2008) remains intact.

The concept of incremental costs is closely related to the concept of *global environmental benefits*. It can be—and has been—questioned whether it is at all possible to make a distinction between national and global environmental benefits (Sjöberg 1999: 20), and at the time the Instrument establishing the GEF was agreed upon in 1994, its Chairman Mohamed El-Ashry acknowledged that some flexibility would be needed in its interpretation. The Instrument also stresses that GEF funding needs to be directed to projects and programmes that are country-driven and based on national priorities (GEF 2008a: para. 4), indicating that a simultaneous contribution to global environmental benefits and national (development) priorities is possible. The pragmatic approach taken by the GEF is to link the concept of global environmental benefits to its focal areas and indicators and monitoring tools related to these focal areas (GEF 2007a; 2007b).[48]

The first two concepts are also closely related to the idea of *additionality*. Additionality, in the case of the GEF can refer to additionality of benefits (i.e. global environmental benefits in addition to national/regional/local benefits), additionality of costs (i.e. incremental costs), or additionality of funds (Broughton 2009). The latter refers to the notion that funds provided by donor countries should be in addition to existing official development assistance flows – referred to as 'new and additional'. The 1995 GEF Operational Strategy remarks on this point that "[t]he GEF should ascertain that its resources are applied as new and additional funding, not substitutes for regular sources of development finance" in order "to ensure that scarce resources are not diverted from development financing and to maximize global impact of GEF resources" (GEF 1995: 6). Jordan and Werksman (1996: 248) point out that the word 'new' refers to either the sources of funding or the mechanisms used to provide them, whereas the 'word' additional refers to assistance supplementing existing financial flows. They also note, however, that there is no agreement on how to calculate the

[48] For instance, the GEF has developed global benefit indices in the areas of biodiversity and climate change, through which an indication can be provided of the global benefits of a specific activity. See http://www.thegef.org/gef/node/1740 (last accessed 23 July 2010).

baseline against which this additionality is measured (i.e. existing flows), making it difficult to transform the general commitment to provide new and additional funding into a specific obligation.

3.3.3 Incentives and disincentives

The main incentives provided for by the GEF are most obviously *financial* in nature. According to GEF estimates, since its inception it has allocated US$ 8.8 billion for over 2,400 projects in more than 165 countries, and leveraged another US$ 36.1 billion in cofinancing.[49] Figure 3.1 shows the distribution of funds according to focal area in the period 1991-2008, excluding cofinancing. It can be seen that the largest part of the GEF budget has been spent in the biodiversity focal area, closely followed by climate change. In the area of climate change, however, the GEF has been able to leverage much more cofinancing than in the biodiversity area (US$ 15.7 billion compared to US$ 6.8 billion) (GEF 2009a: 39). The other areas have comparatively attracted less funding from the GEF, although for the areas of land degradation and persistent organic pollutants this can be explained by their later inclusion as a focal area.

In terms of allocation to countries, a relatively large share of GEF funding in the period 1991-2005 has gone to the larger countries, including China, Brazil, Mexico, India and Russia (Rosendal 2009). The most recent overall performance study of the GEF also points out that least-developed countries, small island states and fragile states are missing out on GEF funding (GEF 2010d).

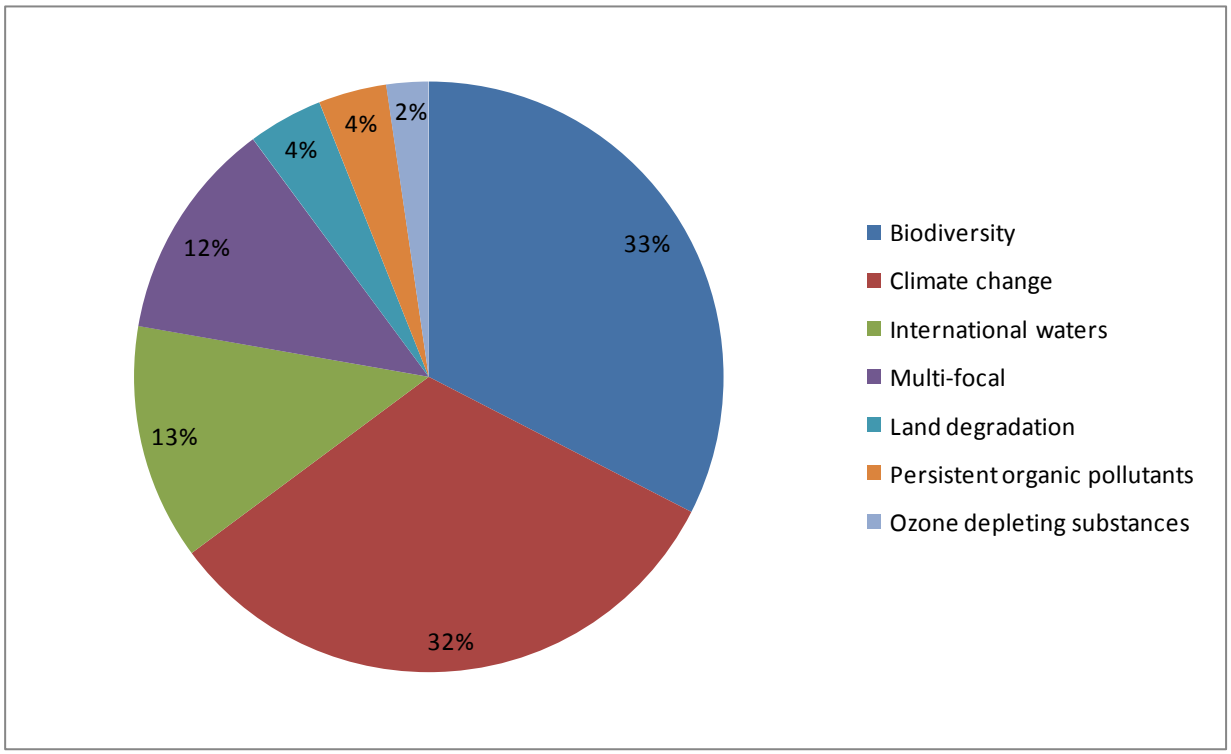

Figure 3.1 Distribution of GEF funds by focal area 1991-2008, excluding cofinancing (GEF 2009a: 39).

[49] See http://www.thegef.org/gef/whatisgef (last accessed 22 July 2010).

Initially, most of the funding was provided through the World Bank. However, the Bank's share in financing GEF projects has declined over time, with the Bank now funding less than one-fourth of all projects (GEF 2010d). The World Bank also traditionally played an important role in leveraging cofinancing (Broughton 2009), but it was notable in 2009 that UNDP also succeeded in achieving high levels of cofinancing. In the period 2005-2008, the World Bank, managed to secure US$ 2.3 for each US$ invested; UNDP had a ratio of $4.8: $1 in 2009 (GEF 2010a: 27-28).

The GEF distinguishes various types of projects. Full-sized projects (FSPs) are projects where the grant is more than US$ 1 million, and which need to follow the normal GEF project cycle. Medium-sized projects (MSPs) are projects where the grant is less than US$ 1 million, and for which an expedited project approval procedure is available. The Project Preparation and Development Facility (PDF) provides support for submitting project proposals, from small grants (up to US$ 25,000) to large grants (up to US$ 1 million). Enabling activities (EAs) are capacity-building grants to support countries in implementing the multilateral environmental agreements that the GEF is servicing. The Small Grants Programme (SGP) provides grants up to US$ 50,000, and is managed by UNDP. More recently, the GEF started to turn to programmatic approaches, which go beyond projects by seeking to influence national and/or regional strategies and plans, and often entail a set of interlinked projects (GEF 2008b).

GEF funding to countries was initially allocated on a first-come-first-served basis. With the fourth replenishment cycle, the allocation moved towards a performance-based system, the Resource Allocation Framework (RAF). It was decided to initially implement the RAF only in the climate change and biodiversity focal areas. The RAF calculates specific allocations through two indices: 1) the GEF Benefits Index, which indicates countries' potential to generate global environmental benefits; and 2) the GEF Performance Index, which provides an indication of countries' capacity, policies and practices relevant for the successful implementation of GEF projects and programmes. The move towards performance-based allocation has raised a number of concerns about: 1) whether it is line with the guidance from the COPs of multilateral environmental agreements; 2) its lack of incentives for high-quality GEF activities; 3) the lack of transparency of some performance indicators; and 4) the additional administrative burdens it imposes (Clémençon 2006; Wiser 2007). Some of these concerns were confirmed by the GEF's own mid-term review of the RAF (GEF 2009c). The RAF was considered too complex and non-transparent. Moreover, it did not necessarily provide incentives for better performance. Furthermore, in the area of climate change, the RAF hindered access to the GEF (GEF 2010d). The conclusions of the review have lead to a revised allocation system for the fifth replenishment of the GEF, the System for Transparent Allocation of Resources (STAR). The STAR is different from the RAF in that it provides a minimum allocation to all countries (US$ 2 million for climate change; $1.5 million for biodiversity; and $0.5 million for land degradation). While the STAR also uses the two indices introduced by the RAF, it also includes a third index which results in higher allocations for countries with a lower gross domestic product (GEF 2010f).

It is important to note that the financial incentives of the GEF are not only aimed at governments. A wide range of actors, including NGOs, are allowed access to GEF funds, provided they meet the eligibility criteria. These are as follows:[50]

The project is undertaken in an eligible country, and is consistent with national priorities and programs;

[50] See http://www.thegef.org/gef/who_can_apply (last accessed 24 July 2010).

- It addresses one or more of the GEF focal areas;
- It is consistent with the GEF operational strategy;
- Financing is sought only for the agreed-on incremental costs;
- It involves the public in project design and implementation; and
- It is endorsed by the government(s) of the country/ies in which it will be implemented.

The GEF does not require its member countries to report. Instead, the GEF Secretariat prepares an annual report on the functioning of the facility, which needs to be approved by the Council (GEF 2008a: para. 31).

3.4 The main actors

3.4.1 Organizational arrangements

The Instrument establishing the GEF also outlines its governance structure. This complex governance structure consists of several components, each of which will be discussed here briefly (for more details, see Broughton 2009).

The first part of the governance structure is the *GEF Assembly*, comprised of the member states of the GEF. At its inception in 1994, the GEF had 73 member countries; this number has grown to 182 member countries in 2010. The Assembly meets every three to four years, coinciding with the replenishment rounds, and is responsible for reviewing the policies and operations of the GEF (GEF 2008a: paras. 13-14). Decisions by the Assembly need to be taken by consensus.

The main decision-making body of the GEF is the *GEF Council*, which meets twice a year. The Council is "responsible for developing, adopting and evaluating the operational policies and programs for GEF-financed activities" (GEF 2008a: para. 15). It consists of 32 members representing 32 GEF-specific constituencies. Like the Assembly, Council decisions need to be taken by consensus. However, if this is not feasible, any member may request a formal vote. Such a vote requires a double weighted majority of both a 60 percent majority of the countries and 60 percent majority of the total contributions (GEF 2008a: para. 25). This ensures that neither donors nor recipients can take a decision alone (Yamin and Depledge 2004).

The role of the *COPs of the conventions* serviced by GEF is primarily to provide guidance to the facility. Relations between the GEF and the treaties are governed through specific Memoranda of Understanding (see below). Besides the UNFCCC and the CBD, which were mentioned earlier, the GEF also services the Stockholm Convention on Persistent Organic Pollutants, the United Nations Convention to Combat Desertification, and—through its relation with the UNFCCC and the CBD—the Kyoto Protocol and the Cartagena Protocol on Biosafety. Whereas the GEF serves as the financial mechanism for the climate and biodiversity treaties, it is "available to serve" as financial mechanism for the other treaties (GEF 2008a: para. 6).

Another important component of the GEF governance structure are the *GEF Agencies*. These agencies are responsible for overseeing projects on the ground, and for supporting eligible governments and NGOs in developing and implementing projects. As discussed above, the GEF originally comprised three Implementing Agencies. In 1999, these were joined by seven Executing Agencies that would also be able to access funding and execute projects (Table 3.2). The relation between the implementing agencies and the GEF is regulated by Annex D of the Instrument, which indicates the specific 'areas of emphasis' for each of the three implementing agencies. For UNDP,

this includes capacity building and technical assistance; for UNEP the development of scientific and technical analysis and environmental management activities; and for the World Bank it refers to investment projects (GEF 2008a: Annex D).

Table 3.2 The GEF Agencies

Implementing Agencies	Executing Agencies
• UNDP • UNEP • Worldbank	• African Development Bank (AFDB) • Asian Development Bank (ADB) • European Bank for Development and Reconstruction (EBRD) • Food and Agriculture Organization of the United Nations (FAO) • Inter-American Development Bank (IBD) • International Fund for Agricultural Development (IFAD) • United Nations Development Organization (UNIDO)

The World Bank is not only one of the three implementing agencies; it also plays an important role as the *GEF Trustee*. This means that the World Bank manages the funds that are used for the purposes of the GEF. Its role as a Trustee should be distinguished from its role as implementing agency (Yamin and Depledge 2004).

With the politicization of the GEF in 1994 (Broughton 2009), the need for a more neutral body in between the member countries and the implementing agencies resulted in the establishment of the *GEF Secretariat* (Andler 2009). The Secretariat is to service and report to the Assembly and the Council, and is responsible, among others, for ensuring the implementation of operational policies adopted by the Council through preparing common guidelines (GEF 2008a: para. 21). In this regard, the Secretariat developed the GEF's operational strategy, which incorporates the guidance from the various COPs, and forms the basis for the operational programmes, which were also developed by the Secretariat. Furthermore, the Secretariat has been involved in developing the GEF's strategic priorities. Given the importance of these strategic and operational documents, the secretariat has been able to exert some influence on the development of GEF policies (Andler 2009). However, the Secretariat has been unsuccessful in its attempts to secure a separate legal status for the GEF due to the resistance of the implementing agencies, in particular the World Bank (Smyth 2009).

Finally, a few other bodies should be mentioned as part of the GEF's organizational arrangements. The *Scientific and Technical Advisory Panel (STAP)* provides scientific and technical advice on policies, operational strategies and programmes, and evaluates selected projects. Member country *Focal Points* play a role in the relation between the GEF and a specific country. Political focal points deal with issues related to GEF policies and decisions, whereas operational focal points are rather concerned with project activities within the country. Finally, an independent *Evaluation Office* is responsible for monitoring and evaluating sets of projects from more than one GEF Agency, for instance, by conducting thematic or country-wide evaluations.

3.4.2 Other relevant actors

The GEF's relationship with *non-governmental organizations (NGOs)* has been the subject of some academic analyses (Reed 1993; Young 1999). In the pilot phase of the GEF, the role of NGOs at the international level was still limited, as they had no formal rights to be involved in the process. This lack of participation became the subject of

much criticism, and the role of NGOs has slowly expanded over time (Streck 2001). The Instrument establishing the GEF stated that the implementing agencies needed to cooperate with NGOs, among others. In 1995, the Council approved a formal relationship between the GEF and NGOs, following which the NGO Network of the GEF was established.[51] Another important decision taken that year was to allow NGO consultations the day before Assembly meetings (Streck 2001). Initially, the Council developed criteria for selecting the organizations which could attend or observe the GEF meetings; this has been replaced by a system of accreditation through the GEF-NGO network (GEF 2010b).

While some NGOs have been part and parcel of the GEF system since its inception, others have remained more critical of the GEF (Young 1999). However, both types of NGOs are needed as indicated by Streck (2001: 89): "...it is exactly the variety and the plurality of the NGO community that makes the close cooperation with these groups one of the most important assets for the GEF".

Beyond NGOs, the GEF also developed policies on involvement of the *general public* (which may or may not include NGOs) in the design, implementation and evaluation of projects (GEF 1996). Furthermore, the GEF's operational strategy provides for stakeholder participation in GEF projects (GEF 1995).

3.5 Forest policies

While forestry and forest management was not one of the initial focal areas of the GEF, it has been active in this field nevertheless. According to the GEF (2010c), it has financed more than 300 projects in the area of forest conservation and management, worth over US$1.6 billion, and leveraging a further US$5 billion in cofinancing.

Initially, forestry projects were primarily financed through the biodiversity, land degradation and multifocal areas (GEF 2005b). Under the biodiversity focal area, a separate operational programme dealt with forest ecosystems until the fourth replenishment cycle, whereas under the climate change focal area a strategic programme was set up for land-use, land use-change and forestry (LULUCF). In 2007, the GEF Council decided on a separate, cross-cutting strategic programme for sustainable forest management for the fourth replenishment cycle (GEF 2007a). The strategy document accompanying the programme notes the guidance from the UNFCCC, CBD, and UNCCD and their COPs with respect to forest management, as well as other developments in global governance (such as the United Nations Forum on Forests). It includes two main strategic objectives, which are to be achieved through various existing and newly established strategic programmes. Box 3.1 describes the strategic objectives and strategic programmes. It also provides an indication of how the GEF's forest policies are dispersed over a number of focal areas and specific strategic programmes.

Box 3.1 Strategic objectives and related strategic programmes for sustainable forest management in the fourth replenishment cycle (focal areas in brackets) (GEF 2007).

Strategic objective 1: Conservation of globally-significant forest biodiversity

- *Sustainable financing for protected area systems at the national level (Biodiversity).* This includes promoting payments for environmental services

[51] See http://www.gefngo.org/index.cfm?&menuid=75 (last accessed 24 July 2010).

generated by forest protected areas.
- *Strengthening terrestrial protected area networks (Biodiversity)*. This strategic programme is aimed at including new forest ecosystems under protected areas.
- *Forest conservation as a means to protect carbon stocks and avoid CO_2 emissions (Biodiversity/Climate change/Land degradation)*. This new strategic programme is aimed at promoting the reduction of greenhouse gases from LULUCF, by establishing methodologies for measuring carbon stored by and emitted from LULUCF, building national capacity, and promote measures to enhance reliably measured carbon sequestration.

Strategic objective 2: Sustainable management and use of forest resources

- *Strengthening the policy and regulatory framework for mainstreaming biodiversity (Biodiversity)*. This programme is aimed at taking away barriers to integrating biodiversity concerns in forest policies.
- *Prevention, control and management of alien invasive species (Biodiversity)*.
- *Fostering markets for biodiversity goods and services (Biodiversity)*. This includes promoting improved forest certification standards.
- *Sustainable forest management in production landscapes (Land degradation)*. This programme is aimed at the management of woodlands, humid forest margins and reducing forest fragmentation.
- *Promoting sustainable energy production from biomass (Biodiversity/Climate change/Land degradation)*. This new strategic programme supports the use of biomass for electricity and heat production, provided it comes from sustainable sources.

Under the sustainable forest management programme the GEF funded projects worth about US$ 200 million between 2007 and 2009. The programme included a new approach, known as the Tropical Forest Account, through which countries were encouraged to use the funding under the programme in combination with allocations under other focal areas. This initiative was implemented for three areas containing a substantial part of the world's tropical forests (the Amazon, the Congo Basin and Papua New Guinea and Borneo) (GEF 2010g).

Sustainable forest management and LULUCF became more prominent in the fifth replenishment cycle. The new strategy includes two revised strategic objectives, which are: 1) to reduce pressures on forest resources and generate sustainable flows of forest ecosystem services; and 2) to strengthen the enabling environment to reduce greenhouse gas emissions from deforestation and forest degradation and enhance carbon sinks from LULUCF activities (GEF 2009b). More specifically, the GEF has created a 'funding envelope' for sustainable forest management and reducing emissions from deforestation and forest degradation (REDD[52]) of US$ 250 million. Such a specific budget for sustainable forest management was still missing in the fourth replenishment. The forest-related funding can be combined with country's STAR allocations (see above) in the areas of climate change, biodiversity and land degradation, an approach that builds on the idea of the Tropical Forest Account. Altogether, this is expected to lead to GEF funding for sustainable forest management and REDD of about $1 billion (GEF 2010e), and a further $3 billion in cofinancing. The rules for accessing these funds are still under development.

How the GEF has performed in the area of (sustainable) forest management remains somewhat elusive, save for agency-specific analyses (Boyle 2003) and early individual

[52] Most of the recent GEF documents mention REDD+, which is meant to include forest conservation, sustainable forest management and enhancement of carbon stocks.

case studies (e.g. Jones 1995). The GEF's Evaluation Office has so far not carried out an assessment of the GEF's work on forest management, although its evaluations of the climate change and biodiversity focal areas are of relevance (GEF 2004a; 2004b). The biodiversity evaluation shows, among others, that the operational programme on forest ecosystems was one of the major programmes in the biodiversity focal area in terms of resources allocated (GEF 2004a).

3.6 Interlinkages with the climate regime

3.6.1 Overview of interlinkages

There are clear interlinkages between the substantive areas covered by the GEF and the climate regime, given that finance forms an essential part in promoting both climate change mitigation and adaptation in the developing world.[53] The GEF's mandate with regard to forests, however, is broader than that of the climate regime, covering forests' non-carbon functions as well, and being inspired not only by guidance of the UNFCCC COP, but also by the COPs of the CBD and the UNCCD. In other words, the GEF approach to financing forest-related projects may follow guidance by the UNFCCC, but this should not result in projects that run counter to the guidance of the other conventions.

There are also various institutional interlinkages between the GEF and the climate regime. The climate convention defines a financial mechanism, which is to function under the guidance of, and is accountable to, the COP, which decides on its policies, programme priorities and eligibility criteria.[54] It also stipulates that this mechanism will have an equitable and balanced representation of all parties within a transparent system of governance.[55] The financial mechanism is also available for the Kyoto Protocol, which contains provisions similar to those of the Convention.[56] The Instrument establishing the GEF mirrors the text about the relation between the GEF and the UNFCCC, indicating that "the GEF shall function under the guidance of, and be accountable to, the Conferences of the Parties which shall decide on policies, program priorities and eligibility criteria for the purposes of the conventions" (GEF 2008a: para. 6). In addition, the GEF and the climate regime are connected as the GEF is administering the two of the climate funds established through the Kyoto Protocol (the Adaptation Fund; Least Developed Countries Fund; and Special Climate Change Fund). At the second COP of the UNFCCC in 1996, a Memorandum of Understanding was adopted, which specified the role of both the UNFCCC COP and the GEF (UNFCCC 1996). While the Memorandum of Understanding resembles a legal agreement, its legal status remains unclear given the uncertain legal status of both the COP and the GEF (Yamin and Depledge 2004).

3.6.2 Policy response to interlinkages

While the Instrument establishing the GEF thus indicates that the use of GEF resources for the purposes of the different multilateral environmental agreements needs to be in conformity with the policies, programme priorities and eligibility criteria decided by

[53] Indeed, finance was one of the four pillars of the 2007 Bali Action Plan, outlining the future of the UN climate regime.
[54] Art. 11.1 UNFCCC.
[55] Art. 11.2 UNFCCC.
[56] Art. 11 Kyoto Protocol.

the COPs of those treaties, it is still possible that conflicts might arise between the objectives of those treaties and the GEF for specific decisions (Werksman 1995: 60; Gupta 1995). One potential normative conflict is the question of who has the final say in project funding and general decisions. In the case of conflicts, the GEF could ultimately be held accountable by the COP of the UNFCCC (Sands 2003: 1036). A recent conflict that emerged related to the RAF, as the system was impeding access by some countries to GEF funding. This sparked much criticism from developing countries in the climate regime, and prompted a response by the UNFCCC COP (UNFCCC 2009).

As indicated above, the main mechanism to address interlinkages between the GEF and the climate regime is the guidance by the UNFCCC COP to the GEF and, related to this, the annual reports of the GEF to the COP.57 In its guidance to the GEF, it can be noted that the UNFCCC COP has only marginally touched upon specific LULUCF issues. However, at COP-12 in 2006, Parties to the UNFCCC called on the GEF to "explore options for undertaking [LULUCF] within the climate change focal area of the [GEF], in light of past experience". This request was supported by countries like the United States,58 and was responded to by the GEF through its work on sustainable forest management in the fourth and fifth replenishment cycles. Especially in the fifth replenishment, the role of forests as carbon sinks has come to the forefront, and—following the climate negotiations since COP-13 in Bali—the GEF has increased its involvement in REDD. The increased attention for REDD within the GEF can be seen as a response to developments within the UNFCCC. Indeed, calls in the Copenhagen Accord for financing REDD are mentioned as one of the rationales for including REDD on the GEF agenda (GEF 2010c).

Notwithstanding the guidance by the UNFCCC, it can be observed that most forest-related guidance to the GEF has come from the biodiversity COPs (for an overview, see GEF 2004a: 122). This includes guidance to provide financial support for the implementation of the CBD's programme of work on forest biodiversity; but also guidance to provide support to activities that simultaneously seek to implement the provisions of the UNFCCC and the CBD.

3.6.3 Discussion

One of the ways in which the GEF has sought to respond to the interlinkages between its work and the climate regime is by moving away from "sectoral silos" (Mee et al. 2008: 808), and finding ways to explore synergies among focal areas. This is particularly visible in its crosscutting programme on sustainable forest management. The GEF's forest activities were initially concentrated in the biodiversity focal area, followed later by the land degradation and the climate change focal areas (GEF 2005b). The creation of sustainable forest management as a crosscutting area of work represents a change in strategic thinking that goes beyond assigning specific problems to specific focal areas, but acknowledging that certain issues are of relevance for the various conventions (Mee et al. 2008). As the financial mechanism of all three Rio Conventions, the GEF is increasingly becoming aware that it is well-placed to maximize synergies between the issues of climate change, biodiversity and land degradation through its work on sustainable forest management, LULUCF and REDD.

57 See http://unfccc.int/cooperation_and_support/financial_mechanism/items/3741.php (last accessed 29 July 2010).

58 See http://gefeo.org/uploadedFiles/Policies/Focal_Area_Strategies/US%20Focal%20Area%20Strategy%20Cmnts.042507.pdf (last accessed 30 July 2010).

To what extent it is able to maximize these synergies in practice remains to be seen however.

3.7 Lessons learned

The analysis of the GEF shows that there are a number of lessons that can be learned for forest governance and the efforts to reduce deforestation and forest degradation in the climate regime.

First, the history of the GEF shows how challenging it is to operationalize concepts such as 'global environmental benefits', 'incremental costs' and 'additionality'. While there may have been a rationale for creating a fund that is aimed at only supporting activities that have only global benefits, this distinction is not easy to make in practice and can be counter-productive in ensuring the success of a project. Forest management exemplifies this problem. The different functions of forests manifest themselves at different levels. While the function of forests as carbon stocks may arguably lead to 'global' benefits, the sustainable management of forests would also lead to benefits with a more national or local character, such as socio-economic benefits. In line with this observation, Rosendal (2009) argues that the GEF experience shows that it has so far been easier to distinguish between global and national benefits in climate change projects than in biodiversity projects. This provides some indication that REDD activities financed by the GEF may emphasize the carbon sink function of forests, perhaps at the expense of other services provided by forests. Furthermore, a focus on the global benefits, when there are no resources for the related local benefits may lead to projects that focus on global benefits and exclude local benefits – reducing the motivation of the local actors to implement such projects.

Second, while the GEF has been underfunded (e.g. GEF 2010d), it remains the most important source of funding for tackling global environmental problems, including forest management. However, recent years have shown that the GEF rules for funding may make it difficult to target the 'right' countries. In particular, the RAF applied in the fourth replenishment resulted in funding being diverted from the least-developed countries to the larger economies, a result of the strong emphasis on governance performance. This followed the parallel discussions in the development cooperation world that aid money was best spent in countries with good governance (cf. Gupta and Thompson 2010). In the case of forest governance, such an approach would lead to less funding for countries where combating deforestation is already inhibited by weak governance structures (e.g. Democratic Republic of Congo) (Rosendal 2009). However, this could also lead to new problems of corruption and ineffective project implementation which could lead to new questions regarding aid effectiveness.

Third, while the GEF may be the most appropriate financial mechanism for funding projects that result in synergies between the different multilateral environmental agreements, it has been shown that in practice the GEF has rather followed a sectoral approach, where insufficient attention was paid to related global environmental problems. The area of sustainable forest management may be an example of how the GEF can tackle different global environmental issues simultaneously (Mee et al. 2008).

4 The International Tropical Timber Organization, Forests and Climate Change

4.1 Introduction

This chapter focuses on the International Tropical Timber Organization (ITTO), one of the very few international organizations focusing solely on forests. The ITTO came into being in 1985 as the organization implementing the 1983 International Tropical Timber Agreement (ITTA), and fulfils that same function for its successor agreement, the ITTA 1994.[59] More recently, negotiations to a successor led to the ITTA 2006, which is yet to enter into force. The ITTO is in the first place a commodity organization, whose mandate is to facilitate and regulate the international trade in tropical timber between producer and consumer countries. Hence, of the several forest functions covered by Ruis (2001), the ITTO primarily aims at wood products. However, the goals of the ITTA (and the ITTO) are broader than that. The ITTA is regarded as "the first international commodity agreement to attempt to resolve the tension between environmental conservation and trade promotion" (Wilson Jr. 1996: 229), and is one of the few international legal instruments regulating forest management in the context of economic production (McDermott et al. 2007). To what extent it has been successful in achieving that aim, however, remains the subject of much discussion. As such, how the ITTO has dealt with forests and forest products can provide a number of lessons to be learned for forest governance and efforts to reduce deforestation and forest degradation in the climate regime. Furthermore, the ITTO has increasingly become directly involved in discussions and actions addressing the relation between tackling deforestation and climate change.

Against this background, this chapter aims to provide an overview of the ITTO, its relevance to forests, and the interlinkages between the ITTO and the climate regime with regard to forests. To this end, the chapter is structured as follows. Section 2 first discusses briefly the history, while Section 3 describes some of the key features of the ITTO, including an overview of the incentives and disincentives provided by the organization. Section 4 then continues to discuss the main actors involved in the regime, including the organizational arrangements provided for. Section 5 examines the ITTO's activities on forests. Section 6 then discusses the interlinkages between the ITTO and the climate regime. Finally, Section 7 provides some of the lessons learned from this case study.

4.2 History

The idea of an international agreement on forest and timber products goes back to 1966, when a working party of the United Nations Conference on Trade and Development (UNCTAD) proposed to establish an international tropical timber bureau. The rationale for such a bureau was primarily to foster and enhance trade in wood products. Discussions were mainly conducted under the auspices of the International Trade Centre (ITC), which had been established pursuant to a decision by Parties to the 1947 General Agreement on Tariffs and Trade (GATT). However, not all actors involved (e.g. UNDP) were convinced there was a need for a bureau. While the ITC was eventually successful in convincing the tropical timber producing countries to establish a bureau, the resulting treaty did not receive any ratification (Poore 2003). One of the

[59] Geneva, 10 January 1994, reprinted in 33 ILM 1014.

reasons may be that by that time, in the late 1970s, negotiations had already started under the auspices of UNCTAD to regulate the international trade in wood products. In these negotiations, it became clear that the agreement was meant to be more than just another commodity agreement; it was also to include "some elements of sustainable forestry management" (Kasimbazi 1996: 142). There were divisions between producer countries (mainly from Asia, Africa and Latin America) and consumer countries (mainly Europe, the United States and Japan): whereas the former emphasized the importance of market access and a higher price for their timber products, the latter were aiming at the continuity of tropical timber supplies. The consumer countries' priorities inevitably led to discussions about the state of tropical forests, and signs of rapid deforestation and a lack of reforestation resulted in the consideration of forest management in the agreement, although a specific proposal for a reforestation fund was not included in the final agreement (Poore 2003),[60] and it remains debatable whether countries really were driven by ecological concerns (Nagtzaam 2010). After six negotiation sessions, the ITTA was eventually adopted by UNCTAD in Geneva in November 1983. The agreement entered into force one and a half year later, on 1 April 1985.[61] This was half a year later than the initial definitive date for entry into force, which was 1 October 1984. It was especially difficult to obtain the necessary ratifications from producer states (Poore 2003). After a conference held in London and including many of the relevant producer and consumer countries, the mood changed, and it was possible to get countries to sign and ratify the treaty. Nagtzaam (2010) argues that the main reason why countries signed and ratified the ITTA 1983 was the perceived need to do something about the increasing rate of deforestation, while sticking as closely as possible to business-as-usual.

The ITTA 1983 distinguished between two types of members: 'producing members', defined as "any country with tropical forest resources and/or a net exporter of tropical timber" or countries that would like to be included in this group (provided there is approval by the International Tropical Timber Council (ITTC)) and 'consuming members', which includes countries that opt to be in this group (again, provided there is approval by the ITTC).[62] These open definitions, with slight variations, have also been adopted in subsequent agreements. The agreement also established the ITTO,[63] with the ITTC as its "highest authority".[64] The ITTO became operational in 1987 (ITTC 2009b).

In the first years, the ITTO was mainly preoccupied with identifying projects that contributed to the objectives of the ITTA 1983, such as building databases on tropical timber trade, reforestation projects, and capacity building in producer countries (Humphreys 1996: 63). The ITTO also adopted a rather vaguely described—and hence controversial—objective: to "strive for an international trade of tropical timber from sustainably managed forests" by 2000 (Target 2000, later renamed Objective 2000) at the tenth meeting of the ITTC in Quito, Ecuador in 1991. Furthermore, in the early 1990s, the ITTO became active as an informal standard-setter, by adopting guidelines for the sustainable management of natural tropical forests; for the establishment and

[60] The fund was to be based on a 1% levy on internationally traded tropical timber (Humphreys 1996: 56). The proposal was rejected after an intervention by the International Bank for Reconstruction and Development (IBRD), part of the World Bank, which argued that there was no need for such a fund given expected fund provided through the IBRD.

[61] The agreement was in force for an initial period of five years, but this period was extended twice. The treaty expired when the ITTA 1994 entered into force.

[62] Art. 2.4-5 ITTA 1983.

[63] Art. 3 ITTA 1983.

[64] Art. 6.1 ITTA 1983.

sustainable management of planted tropical forests; and for the conservation of biodiversity in tropical production forests. To what extent these guidelines are being taken up in practice in member countries, however, remains unclear (Humphreys 1996: 70). By this time, the ITTO became the subject of an increasing amount of criticism from environmental NGOs, who argued that the organization was too busy with the nitty-gritty work of project approval, while eschewing broader policy questions such as the introduction of timber labelling (Humphreys 1996; Poore 2003).

Informal discussions on a follow-up agreement to the ITTA 1983 started in 1983. The most contested issue in these negotiations became the scope of the agreement: whereas consumer countries, supported by timber trade organizations, wanted to continue to include only tropical timber, producer countries, supported by environmental NGOS (albeit for different reasons[65]), wanted to include all timbers (in order to avoid trade discrimination) and replace the consumer/producer country with a developed/developing country distinction. Consumer countries also wanted to further emphasize the conservation objectives of the ITTA (Humphreys 1996). On the scope, they argued that the producer countries' wish to expand the coverage would result in a shift of the balance of power to the North; and that the inclusion of other types of timber was unnecessary (Nagtzaam 2010). The renegotiation of the ITTA 1983 eventually lasted more than a year, and was concluded in January 1994. To appease the concerns of producer countries and NGOs, the consumer countries published a non-legally binding statement on the day the ITTA 1994 was agreed upon, stating their intentions to achieve sustainable management of their forests by 2000 (Humphreys 1996). The consumer countries managed to maintain the status quo regarding the scope of the ITTA, although they agreed to include a clause that allowed for a review of the scope after four years after the entry into force.[66] Furthermore, the consumer countries agreed to establish a fund (the Bali Partnership Fund) to help producer countries achieve the Objective 2000.[67] Perhaps most importantly, the ITTA 1994 does not resolve the controversy regarding its objectives (trade or conservation), and "could just as easily be perceived as a continuation of the status quo without fixing the problems that had become so apparent in the first ten years of the original ITTA" (Nagtzaam 2010: 294). The ITTA 1994 entered into force on 1 January 1997 for a five-year period. It was extended twice for periods of three years.

By the year 2000, the credibility of the ITTO was tested by an assessment of its progress towards its self-declared target for that year (Poore and Chiew 2000). Generally, the assessment was hampered by the fact that there was a lack of relevant information (Nagtzaam 2010). The assessment of progress by producer countries was moderately positive, especially in the fields of policy and legislative reform. However, there was little evidence that this had led to actions on the ground, particularly in light of insufficient personal and financial capacity (Poore and Chiew 2000: 199). The conclusions for consumer countries were very positive, with the authors noting that "all consumer countries of ITTO are committed to sustainable forest management of their forest resources" (Poore and Chiew 2000: 204). The ITTO is praised as an organization that "has probably done more in the 15 year of its existence than any other organisation to advance the idea of sustainable tropical forest management" (Poore and Chiew 2000: 205). However, the key questions of how much of the timber that is traded stems from sustainably managed sources and how much forest area is

[65] Environmental NGOs at the same time sought to limit the conservation mandate of the new agreement, whereas producer countries wanted to give the new agreement a higher profile (Humphreys 1996: 108).

[66] Art. 35 ITTA 1994.

[67] Art. 21 ITTA 1994.

managed sustainably remains unanswered by the assessment. Furthermore, the recommendations of the report remain to be implemented (Nagtzaam 2010).

The ITTA 1994 was due to expire in 2006, which necessitated further renegotiations of the agreement. The scope became again the subject of discussion, with questions being raised about whether to include provisions on non-timber forest products and ecosystem services (Flejzor 2005b). While the ITTA 2006 in the end was not expanded in this regard, it aimed at "promoting better understanding of the contribution of non-timber forest products and environmental services to the sustainable management of tropical forests".[68]

[68] Art. 1(q) ITTA 2006.

Table 4.1 Members of the ITTO.[69]

Producer members	Consumer members

Africa
• Cameroon
• Central African Republic
• Congo
• Côte d'Ivoire
• Democratic Republic of the Congo
• Gabon
• Ghana
• Liberia
• Nigeria
• Togo
Asia & Pacific
• Cambodia
• Fiji
• India
• Indonesia
• Malaysia
• Myanmar
• Papua New Guinea
• Philippines
• Thailand
• Vanuatu
Latin America
• Bolivia
• Brazil
• Colombia
• Ecuador
• Guatemala
• Guyana
• Honduras
• Mexico
• Panama
• Peru
• Suriname
• Trinidad and Tobago
• Venezuela
	• Australia
	• Canada
	• China
	• Egypt
	• European Union
	  • Austria
	  • Belgium/Luxembourg
	  • Denmark
	  • Finland
	  • France
	  • Germany
	  • Greece
	  • Ireland
	  • Italy
	  • Netherlands
	  • Poland
	  • Portugal
	  • Spain
	  • Sweden
	  • United Kingdom
	• Japan
	• Nepal
	• New Zealand
	• Norway
	• Republic of Korea
	• Switzerland
	• United States of America

Table 4.1 lists the members of the ITTO, which according to the ITTC (2009b: 3) "represent about 80% of the world's tropical forests and 90% of the world's tropical timber trade". The ITTA 2006 is yet to enter into force, which has forced the ITTC to extend the application of the ITTA 1994 (e.g. ITTC 2009a). As of 19 July 2010, 47 countries have ratified or acceded to the ITTA 2006,[70] whereas 61 countries have

[69] See http://www.itto.int/en/itto_members/ (last accessed on 20 July 2010).

[70] See http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XIX-46&chapter=19&lang=en (last accessed on 19 July 2010).

ratified the ITTA 1994.[71] Entry into force of the ITTA 2006 depends on the ratification of producer countries holding at least 60% of the votes indicated in the agreement, and 10 consumer countries accounting for 60% of the global import volume of tropical timber in 2005. Given the status of ratifications, some expect the ITTA 2006 to enter into force by the end of 2010 (IISD 2009).

4.3 Key features

4.3.1 Objectives

The objectives of the ITTA 1994 are manifold (see Box 4.1). On the one hand, they reflect the need to pursue sustainable development—a clause that was missing from the ITTA 1983—and to ensure the conservation of forests, while on the other hand the agreement still promotes the expansion and diversification of the international tropical timber trade. The nature of a 'commodity-plus' agreement has thus not been abandoned, and the agreement "has been drafted to suggest that the two objectives [of timber production and forest conservation] are simultaneously attainable" (Humphreys 1996: 132). Critics, however, argue that the ITTA's environmental goals remain subsidiary to the timber trade objectives (Nagtzaam 2010).

Another notable addition to the objectives in the ITTA 1994 was the development of mechanisms for the provision of new and additional financial resources and expertise to enhance producer countries' capacities and the promotion of technology transfer on concessional and preferential terms and conditions, which has been an important clause from the perspective of developing countries (Humphreys 1996: 125).

Box 4.1 Objectives of the ITTA 1994 (art. 1).

a. To provide an effective framework for consultation, international cooperation and policy development among all members with regard to all relevant aspects of the world timber economy;
b. To provide a forum for consultation to promote non-discriminatory timber trade practices;
c. To contribute to the process of sustainable development;
d. To enhance the capacity of members to implement a strategy for achieving exports of tropical timber and timber products from sustainably managed sources by the year 2000;
e. To promote the expansion and diversification of international trade in tropical timber from sustainable sources by improving the structural conditions in international markets, by taking into account, on the one hand, a long-term increase in consumption and continuity of supplies, and, on the other, prices which reflect the costs of sustainable forest management and which are remunerative and equitable for members, and the improvement of market access;
f. To promote and support research and development with a view to improving forest management and efficiency of wood utilization as well as increasing the capacity to conserve and enhance other forest values in timber producing tropical forests;
g. To develop and contribute towards mechanisms for the provision of new and

[71] See http://treaties.un.org/doc/publication/mtdsg/volume%20ii/chapter%20xix/xix-46.en.pdf (last accessed on 19 July 2010).

additional financial resources and expertise needed to enhance the capacity of producing members to attain the objectives of this Agreement;

h. To improve market intelligence with a view to ensuring greater transparency in the international timber market, including the gathering, compilation, and dissemination of trade related data, including data related to species being traded;
i. To promote increased and further processing of tropical timber from sustainable sources in producing member countries with a view to promoting their industrialization and thereby increasing their employment opportunities and export earnings;
j. To encourage members to support and develop industrial tropical timber reforestation and forest management activities as well as rehabilitation of degraded forest land, with due regard for the interests of local communities dependent on forest resources;
k. To improve marketing and distribution of tropical timber exports from sustainably managed sources;
l. To encourage members to develop national policies aimed at sustainable utilization and conservation of timber producing forests and their genetic resources and at maintaining the ecological balance in the regions concerned, in the context of tropical timber trade;
m. To promote the access to, and transfer of, technologies and technical cooperation to implement the objectives of this Agreement, including on concessional and preferential terms and conditions, as mutually agreed; and
n. To encourage information-sharing on the international timber market.

The ITTA 2006 adds to and alters this list on a few counts. The list is now preceded by the treaty's overarching objectives, which are "to promote the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests and to promote the sustainable management of tropical timber producing forests".[72] Furthermore, the objective of sustainable development is now coupled with poverty alleviation.[73] The list now also includes specific objectives related to improved forest law enforcement and governance and illegal logging,[74] the use of voluntary instruments (e.g. certification) in sustainable forest management,[75] the contribution of non-timber forest products and environmental services to sustainable forest management,[76] and the role of indigenous and local communities.[77]

4.3.2 Concepts

As noted above, the various agreements attempt to reconcile two seemingly competing objectives in a commodity agreement. The key concepts promoted by the organization are related to these overarching objectives.

First, the ITTA 1994 and ITTA 2006 both emphasize *sovereignty over natural resources*. The ITTA 2006 refers explicitly to the member countries' "sovereign right to exploit their own resources pursuant to their own environmental policies", linking this to their "responsibility to ensure that activities within their jurisdiction and control do

[72] Art. 1 ITTA 2006.
[73] Art. 1(c) ITTA 2006.
[74] Art. 1(n) ITTA 2006.
[75] Art. 1(o) ITTA 2006.
[76] Art. 1(q) ITTA 2006.
[77] Art. 1(r) ITTA 2006.

not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction". This is a direct reference to Principle 2 of the 1992 Rio Declaration on Environment and Development and Principle 21 of the 1972 Stockholm Declaration on the Human Environment. Such a direct link was still absent in the ITTA 1994, which leads Nagtzaam (2010) to conclude that the ITTO is increasingly seeing exploitation of forest resources as the governing norm.

Arguably, another key concept of the ITTO is the *conservation* of tropical forest resources. It is featured in the ITTA 1994 and ITTA 2006, and all member countries are encouraged to adopt policies to this end in the context of the tropical timber trade. However, the extent to which this globally agreed norm is supported by member countries in practice can be questioned. Nagtzaam (2010) argues that the adherence to conservation is of a symbolic nature, and that forest conservation is not brought about by the ITTO.

Finally, the concept of *sustainable forest management* is of key importance. It is defined by the ITTO as "the process of managing forest to achieve one or more clearly specified objectives of management with regard to the production of a continuous flow of desired forest products and services without undue reduction of its inherent values and future productivity and without undue undesirable effects on the physical and social environment" (ITTO 2005a: 35). To provide practical guidance on how to interpret the term, the ITTO was the first organization to develop criteria and indicators (C&I) for the sustainable management of tropical forests in 1992. The latest version of the C&I is of 2005 (ITTO 2005a). The concept of sustainable forest management is used by the ITTO to show it takes a holistic view of forests, and does not focus only on timber production (ITTO 2007). However, whether the ITTO takes such a holistic approach in practice has been questioned by several authors (e.g. Kasimbazi 1996; Nagtzaam 2010).

4.3.3 Incentives and disincentives

The ITTA provides various incentives to achieve its dual objectives of promoting timber trade and ensuring sustainable forest management. The primary subjects of these incentives are the member country governments, although some of the incentives may also affect non-state actors, such as timber companies.

A first type of incentive included in the ITTA 1994 (although introduced earlier) is the aforementioned *Objective 2000* of achieving exports of tropical timber products from sustainably managed sources by 2000. After the progress report was released in 2000 (Poore and Chiew 2000), the ITTC reaffirmed its commitment to achieving this objective "as rapidly as possible" (ITTC 2009b: 6). This commitment was supported by diagnostic missions to tropical member countries to analyse the barriers to achieving the objective, and recommend action plans to overcome those barriers. By the end of 2008, [22] of such missions had been carried out. However, while the C&I developed by the ITTO provide some indication of how to determine which products come from sustainably managed sources, it falls short of a labelling or certification system. The objective therefore remains somewhat vague. Furthermore, while initially the target was attached to a date that was—in hindsight—unrealistic, there is no end date at all anymore. To what extent the objective therefore provides a proper incentive for countries to ensure that their timber exports and imports are related to sustainable forest management therefore remains doubtful.

The ITTO system also includes *financial incentives*. While the idea of a reforestation fund was proposed but not included in the original ITTA 1983, the ITTA 1994 introduced the Bali Partnership Fund to promote activities that would help countries

achieve the year 2000 objective.[78] However, despite the establishment of the fund, the "[f]unding commitments are neither strong nor clear" (Kasimbazi 1996: 150; see also Chaytor 2005; and Nagtzaam 2010). Indeed, the Bali Partnership Fund has remained underfunded (Flejzor 2005b). This is mainly because the fund is for an important part based on voluntary contributions by members. Another fund is the Special Account, which is also dependent on voluntary contributions. The Bali Partnership Fund and the Special Account are used to finance (pre-)projects that "should contribute to the achievement of one or more of the objectives of the [ITTA]".[79] These projects hence play an important role in the ITTO. According to the ITTC (2009c: 34), the organization has so far funded over 970 projects worth more than US$ 345 million. Projects are carried out in three substantive areas for which committees were established (see below): 1) economic information and market intelligence; 2) reforestation and forest management; and 3) forest industry. Most funding has been directed at projects in the area of reforestation and forest management. Projects include supporting countries and regions in developing sustainable forest management plans; providing support in using criteria and indicators; supporting community-based forest management; restore degraded forests, etc. (ITTO 2007).

The ITTA 2006 introduces the possibility to direct funding not at specific project activities but rather at broader thematic programmes. With the adoption of two decisions in 2008 (ITTC 2008a; 2008b), the ITTC decided to implement thematic programmes in five areas:

1. Forest Law Enforcement, Governance and Trade;
2. Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests (see below);
3. Community Forest Management and Enterprises;
4. Trade and Market Transparency; and
5. Industry Development and Efficiency.

The Executive Director of the ITTO is optimistic about the expansion to thematic programmes, as they would "have the potential to considerably increase the Organization's funding base and accelerate the achievement of concrete results in the management of tropical forests" (ITTC 2009c).

The ITTO also provides for various *reporting* mechanisms. Parties to the ITTA 1994 need to provide to the ITTC "to the fullest extent possible not inconsistent with their national legislation" provide "within a reasonable time, statistics and information on timber, its trade and the activities aimed at achieving sustainable management of timber producing forests".[80] Furthermore, ITTO members are to report on their progress towards the Objective 2000 (Braatz 2002). The ITTC has also collected information through national reports (see ITTC 2001a), which are based on detailed reporting formats. The national reports, combined with complementary research, resulted in 2005 in a report on the status of tropical forest management (ITTO 2005b). While the report provides useful information on the state (and the lack) of sustainable forest management, as well as an indication of the data gaps, there is no strong incentive to report. The only incentives based on the ITTA 1994 are surrounded by caveats (not inconsistent with national legislation; within a reasonable time), and the other reporting requirements are rather requests to voluntarily submit reports (Chaytor 2001).

[78] Art. 21 ITTA 1994.
[79] Art. 25.1 ITTA 1994.
[80] Art. 29.2 ITTA 1994.

The ITTA 1994 does not include any sanctions in case of non-compliance of a member, and does not provide for an adequate dispute settlement procedure, but rather refers any (emerging) dispute to the ITTC (Kasimbazi 1996). For an organization regulating a commodity, it is perhaps odd that the ITTO has refrained from authorizing any kind of trade measure. This is not only the case for outright trade bans, but the ITTO has also been wary of adopting measures that could be seen as indirect barriers to trade, such as timber labelling (Kasimbazi 1996).

In sum, while the ITTO includes a number of incentives that are in principle aimed at steering countries towards the export of sustainably managed timber, the strength of these incentives can be questioned.

4.4 The main actors

4.4.1 Organizational arrangements

As discussed above, the ITTA grants the "highest authority" to the *International Tropical Timber Council* (ITTC), which consists of all the (timber-producing and consuming) members of the ITTO.[81] While the ITTC is mandated to carry out the provisions of the ITTA, its mandate lacks specificity, and it is not mandated to propose additional protocols (Chaytor 2001). The ITTC meets at least once every year, although additional sessions may be held if it decides so.

The ITTC may adopt rules and regulations to implement the ITTA by special vote.[82] A special vote means a vote of "at least two thirds of the votes cast by producing members present and voting and at least 60 per cent of the votes cast by consuming members present and voting, counted separately, on condition that these votes are cast by at least half of the producing members present and voting and at least half of the consuming members present and voting".[83] The voting distribution in the Council is worth mentioning: both the consuming and producing countries hold in total 1000 votes, which are divided as follows: a) 400 votes are divided equally over the three producing regions (Africa, Asia and Pacific, Latin America); these votes are subsequently distributed equally among the members in that region; b) 300 votes are distributed on the basis of the share of tropical forest resources; c) 300 votes are distributed on the basis of the average of the values of their respective net exports of tropical timber during the most recent three-year period for which figures are available; d) for Africa, the votes are distributed equally; e) each consuming member has 10 initial votes; the remainder is distributed in proportion to the average volume of their respective net imports of tropical timber during the three-year period commencing four calendar years prior to the distribution of votes.[84] This distribution of votes results in an equal weight of timber producing and consuming countries, which does not necessarily provide an incentive towards sustainable forest management. What is more, the procedure actually provides an incentive to log, by granting more voting power to countries exporting and importing timber. In contrast, votes based on the amount of forest cover are limited (Kasimbazi 1996). All this means that, under the ITTA 1994, a major consumer like Japan has 320 votes, whereas countries holding the vast majority of tropical forests, such as Brazil (133 votes), the Democratic Republic of Congo (23), Malaysia (139) and Indonesia (170) hold much less

[81] Art. 6 ITTA 1994.
[82] Art. 7.2 ITTA 1994.
[83] Art. 2.8 ITTA 1994.
[84] Art. 10 ITTA 1994.

voting power individually.[85] While all ITTC decisions should in principle be made by consensus,[86] Poore (2003: 40) notes that the dichotomy between consuming and producing countries has often prevented this from happening.

The ITTC's agenda is determined by regular action plans, which are drafted every six years, whereas it also established work programmes on a biennial basis (ITTO 2007). The ITTC has a Chair and a Vice-Chair, which should be from a consuming country and a producer country, and which alternate each year.[87] The ITTC is supported by an *Executive Director*, which is responsible for the administration and operation of the ITTA.[88] The Executive Director is in turn supported by a small secretariat (ITTC 2009b).

The ITTA 1994 also established four permanent committees to assist the ITTC in its operational work:[89]

1. *Committee on Economic Information and Market Intelligence*:[90] responsible, among others for reviewing and analysing data on the international timber market.
2. *Committee on Reforestation and Forest Management*: responsible, among others, for promoting cooperation on reforestation, rehabilitation and forest management; encouraging the increase of technical assistance and technology transfer to developing countries; and ensuring coordination with other international bodies on reforestation, rehabilitation and forest management.
3. *Committee on Forest Industry*: responsible, among others, for promoting cooperation between members with regard to timber processing activities in producing countries.
4. *Committee on Finance and Administration*: responsible, among others, for the budget of the organization.

An important task of the committees lies in the appraisal, monitoring and evaluation of (pre-) projects.

Finally, there are a few other bodies. The *Informal Advisory Group* provides advice to the ITTC, including on how the ITTO should relate itself to other agencies and organizations. The Committees are further assisted by a technical expert panel in the appraisal of projects (ITTC 2009b).

4.4.2 Other relevant actors

As briefly discussed in the history of the ITTO, two types of actors have played an important role in the development of the organization and the agreements: *non-governmental organizations* (NGOs) and *tropical timber trade organizations*. According to Humphreys (1996: 61), the ITTO's policy on observers "is one of the most open arrangements offered by an [intergovernmental organization]". Indeed, the ITTA 1994 states that the ITTO "shall, to the maximum extent possible, utilize the facilities, services and expertise of existing intergovernmental, governmental or non-governmental organizations, in order to avoid duplication of efforts in achieving the objectives of this Agreement and to enhance the complementarity and the efficiency of

[85] Annex A and B ITTA 1994.
[86] Art. 12.1 ITTA 1994.
[87] Art. 8 ITTA 1994.
[88] Art. 16 ITTA 1994.
[89] Art. 26 ITTA 1994.
[90] Under the ITTA 2006, its name is changed to the Committee on Economics, Statistics and Markets.

their activities",[91] and allows the ITTC to invite NGOs "to attend as observers any of the meetings of the Council".[92] Members of the ITTO have included both NGO and timber trade representatives (Humphreys 1996).

Around the time the ITTA 1983 was negotiated, environmental NGOs such as IUCN and the World Wildlife Fund (WWF) were instrumental in ensuring that the treaty entered into force, and have sought to ensure that conservation considerations were taken into account (Nagtzaam 2010). In the 1980s and early 1990s, NGOs formed a coalition to promote environmental interests and limit the international timber trade (Humphreys 2004). In this period, Friends of the Earth suggested that the ITTO should introduce a sustainable timber label, but its efforts were blocked by the producer countries. In the run-up to the ITTA 1994, NGOs were more successful in ensuring that not only timber producing countries but also consuming countries adopted the target for the year 2000, and including a reference to indigenous and local communities. However, they failed to expand the new treaty to all types of timber (Humphreys 2004). In the aftermath of the ITTA 1994 negotiations, many NGOs were disappointed about the lack of progress in the ITTO, and turned their backs on the process (Poore 2003; Humphreys 2004). Overall, NGOs have only been able to exert "slight" influence (Humphreys 2004: 57). According to Nagtzaam (2010), this is because when the decisions were being made, NGOs were not allowed to participate.

4.5 Forest policies

The forest policies developed by the ITTO primarily consist of the various (non-binding) guidelines it has published. The format of these guidelines is mostly similar: they (re)state the objective of sustainable forest management, outline the key principles in a specific area, and include guidelines and recommendations on how these principles should be achieved in practice in the member countries (both at the national level and in specific operational activities). The most important and relevant will be discussed here.

The first guidelines published by the ITTO in 1990 contained a set of international principles for the development of national guidelines for the sustainable management of tropical forests for timber production (ITTO 1992). The document contains 41 principles in total, each combined with a number of possible actions to be taken by the ITTO members, ranging from suggestions about domestic policies to specific operational and management issues.

The ITTO has also released a number of guidelines on, criteria and indicators (C&I) for the measurement of sustainable tropical forest management. The first of these were published in 1992, with revised versions coming out in 1998 and 2005. ITTO member countries are asked to report on the status of their forest management at the national and so-called 'forest management unit' level using the C&I (ITTO 2005a). C&I thus form a monitoring and reporting tool for forest management. Moreover, according to the ITTO (2005a: 7), "[t]he information generated through the use of these C&I will help communicate more effectively the status of efforts towards sustainable forest management" and C&I "will also assist in developing strategies for sustainable forest management". Box 4.2 lists the seven criteria for the sustainable management of tropical forests identified by the ITTO. Each of these criteria is accompanied by a set of indicators. Reporting on these indicators allows some assessment of the state of management of certain tropical forests, and would provide potentially valuable

[91] Art. 14.2 ITTA 1994.
[92] Art. 15 ITTA 1994.

qualitative and quantitative information. However, the guidelines do not provide for a weighting system for the different indicators, nor do they explicitly link the performance on any of these indicators to assessments of whether such management can be deemed 'sustainable'.

Box 4.2 ITTO's seven criteria for sustainable forest management (ITTO 2005a).

1. Enabling conditions for sustainable forest management;
2. Extent and condition of forests;
3. Forest ecosystem health;
4. Forest production;
5. Biological diversity;
6. Soil and water protection;
7. Economic, social and cultural aspects.

Recognizing the relation between timber production forests and forest biodiversity, the ITTO has also published several guidelines related to the conservation and sustainable use of biological diversity in tropical production forests (ITTO 1993b; ITTO/IUCN 2009). The latest version of the guidelines makes explicit references to the work carried out under the auspices of the Convention on Biological Diversity (CBD) as well as the Food and Agriculture Organization (FAO), and synthesizes recommendations related to biodiversity dispersed in other ITTO guidelines. The objectives of the guidelines are: an enhanced role for tropical production forests as components of landscapes that contribute to biodiversity conservation at different spatial scales; the equitable sharing of the costs and benefits of biodiversity conservation and sustainable use in tropical production forests; an improved understanding of the impacts of forest management on biodiversity; the adaptation of forest management practices at all spatial scales to favour the conservation and sustainable use of biodiversity; improved ecological processes in tropical production forests provided by the presence of locally adapted biodiversity; and improved practical forest management at all spatial scales aimed at conserving and sustainably using biodiversity (ITTO/IUCN 2009: 16). To this end, the document contains 11 principles, 46 guidelines, and various priority actions to be carried out by both public and private actors.

Another area in which the ITTO has been involved is the restoration of degraded forests, and planted tropical forests (as opposed to the management of pristine tropical forests). On forest plantations, the ITTO released its guidelines in 1993 (ITTO 1993a). The guidelines acknowledge that while plantations may be beneficial for timber production, they are associated with a number of negative environmental and social impacts. In 2002, the organization also published guidelines on the restoration, management and rehabilitation of degraded and secondary tropical forests (ITTO 2002).

The ITTO has also increasingly been concerned with efforts to address illegal logging and to improve the enforcement of forest laws, especially following a decision in 2001 on forest law enforcement (ITTC 2001b). While the issue is being addressed in ITTO projects and programmes, broader policy guidance remains a sensitive issue given opposition of some producing member countries (Flejzor 2005a). Nevertheless, the ITTO 2006 for the first time includes references to illegal logging.[93]

[93] Art. 1(n) ITTO 2006

While few evaluations of the ITTO's effects on forest management exist, and while it will remain difficult to provide any assessment of the organization in isolation from other international forestry initiatives, it has been noted that the outcomes so far are at best mixed (Flejzor 2005b; Wilson Jr. 1996). The ITTO's objective for 2000 was not met, and the funding provided through the Bali Partnership Fund remains inadequate. Furthermore, the agreement's contribution to sustainable development has been questioned (Kasimbazi 1996; Nagtzaam 2010). Yet, others are more positive. Poore (2003: 257), for instance, argues that the ITTO "has been influential in altering and refining the nature of the forest debate out of all proportion to its size and budget" and that the organization is well aware of its deficiencies.

4.6 Interlinkages with the climate regime

4.6.1 Overview of interlinkages

There are complex material interlinkages between the causes and consequences of climate change and the conservation and sustainable management of tropical forests for timber production. First of all, tropical timber logging and climate change are both drivers of deforestation. Second, sustainable forest management could lead to a secure timber supply and at the same time could lead to the protection of important carbon stocks. According to Robledo and Blaser (2009), 15 of 33 producing members accounted for over 70% of tropical deforestation between 2001 and 2005. Third, climate change may affect the timber market by changing the timber supply and/or changing the types of timber being traded (e.g. Sohngen et al. 2001). Fourth, tropical forest management could help forests adapt to a changing climate (Guariguata et al. 2008).

While there are thus clear connections between the problems that are regulated by the ITTO and the climate regime, the institutional interlinkages are rather limited. The 1992 United Nations Framework Convention on Climate Change (UNFCCC) only receives a cursory mention in the preambles of both the ITTA 1994 and the ITTA 2006. Indirectly, the ITTA 1994 (and ITTA 2006 when it enters into force) includes references: its objectives related to forest values other than timber, the provision of new and additional resources, and reforestation, forest management and rehabilitation of degraded land are relevant from a climate change perspective (Robledo and Blaser 2009). In other words, while the ITTA 1994 does not directly instruct the ITTO to address climate change, it is also not excluded from the organization's mandate.

Conversely, the UNFCCC and its 1997 Kyoto Protocol are not directly concerned with timber production and trade, but interlinkages exist. Under the current rules, these linkages are primarily in the context of the use of credits from afforestation and reforestation projects under the Protocol's Clean Development Mechanism (CDM). Such projects, which could theoretically lead to sustainable forest management, are allowed to a limited extent under the current CDM rules. More recently, the discussions on reduced emissions from deforestation and degradation (REDD) may have implications for the ITTO's efforts to achieve sustainable tropical forest management. It is particularly in light of these discussions that the ITTO has become more active on addressing the interlinkages with the climate regime, as will be discussed below.

4.6.2 Policy response to interlinkages

The ITTO's most recent action plans (2008-2011) acknowledges the link between climate change and the work of the ITTO, indicating that the ITTO should "monitor the

potential implications for the [forest] resource base of climate change and the relevance and appropriateness of policy developments" and that member countries should "[u]ndertake studies and analyses of the latest climate change predictions and report on the implications of these for the resource base at the national level" (ITTO 2008a: 10).

ITTO's initial activities in the area of climate change (mitigation) were related to promoting CDM afforestation and reforestation projects. To this end, the ITTO organised a workshop on the issue, and it funded a project that aims to build capacity for afforestation and reforestation projects in the context of the CDM (Pearson et al. 2006). The organization also released two guidebooks related to afforestation and reforestation, as well as bio-energy projects, in the CDM (Pearson et al. 2006; 2009).

At the thirteenth Conference of the Parties (COP-13) to the UNFCCC in Bali, Indonesia, the Executive Director of the ITTO, Emmanuel Ze Meka made a statement on behalf of the ITTO, in which he indicated that the main link between the two regimes is in reducing emissions from deforestation and forest degradation (REDD), which should contribute to sustainable forest management.94 Similarly, the most recent action plan states that "[t]he outcomes of the current negotiations in the UNFCCC on forest carbon are also likely to have significant implications for the trade in and consumption of tropical timber" and that [i]t is therefore clear that there are strong linkages between the international climate change agenda and the ITTA 2006" (ITTO 2008a: 15). Indeed, the actions of the ITTO related to climate change are primarily related to REDD.

First and foremost, the ITTO's move to thematic programmes (described above) included the introduction of a thematic programme on Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests (REDDES). The programme's overarching objective is "to reduce deforestation and forest degradation, enhance environmental services and help improve forest dependant [sic] livelihoods through sustainable management of tropical forests, forest restoration and other related activities" (ITTO 2009: 7). More specific objectives include capacity building to: reduce unplanned deforestation; reduce forest degradation; contribute to climate change mitigation and other environmental services of tropical forests; contribute to the sustainability and well-being of forest-dependent communities; and enhance adaptation and resilience (ITTO 2009: 7). The ITTO acknowledges the existence of various other international initiatives targeting REDD, but argues that the REDDES thematic programme has an added value, among others, because it addresses forest degradation in addition to avoided deforestation, and because it has the possibility to close geographical gaps left by other initiatives (ITTO 2009: 5-6).

Second, the ITTO has participated in several activities organized by or involving the UNFCCC (Robledo and Blaser 2009), including side-events at the UNFCCC COP-14 in Poznan, Poland in December 2008, and activities organized in the context of the Collaborative Partnership on Forests (which includes, among others, the UNFCCC and the ITTO). Furthermore, it also organized an expert meeting on addressing climate change through sustainable management of tropical forests itself in 2008. This meeting resulted in several recommendations to the ITTO (Box 3), which clearly envisages a bigger role for the organization in policy approaches to REDD (ITTO 2008b).

[94] Statement by Emmanuel Ze Meka, Executive Director of the ITTO at the High-Level Segment of the Thirteenth Conference of the Parties, Bali, Indonesia, 3-14 December 2007. Available at: http://unfccc.int/resource/docs/2007/cop13/stmt/igo/006.pdf (last accessed on 21 July 2010).

Box 4.3 Selected recommendations of the 2008 international expert meeting on addressing climate change through sustainable management of tropical forests to the ITTO (ITTO 2008b).

Develop studies:

- Study implications of climate change for sustainable forest management in the tropics;
- Develop guidelines for climate change mitigation and adaptation options in tropical forests and for accounting for carbon in forest management plans and ITTO projects, and update the ITTO C&I to reflect the current state of knowledge on climate change;
- Analyze approaches to financing tropical forest-based initiatives to climate change mitigation and adaptation.

Capacity building:

- Help member countries to build forest-sector capacity to mitigate and adapt to climate change;
- Support member countries in the assessment and monitoring of forest carbon stocks and forest-based carbon emissions;
- Support member countries in ensuring that forest policy frameworks include climate change considerations;
- Encourage and assist member countries to develop proposals for pilot projects on REDD and other forest mitigation options;
- Support local people to participate in and benefit from initiatives in forest-based climate change mitigation and adaptation.

Knowledge management and information sharing:

- Provide information and guidance on the management of tropical forest types particularly vulnerable to climate change;
- Conduct a global review of best practice in rights-based approaches to REDD and forest-based carbon enhancement in the tropics;
- Actively provide the UNFCCC process with information on tropical forests and the role of sustainable forest management in climate change mitigation and adaptation.

Finally, it should be mentioned that while ITTO guidelines have not ignored the issue of climate change (e.g. ITTO 2002), discussions are underway to update the ITTO guidelines on sustainable tropical forest management to include the integration of climate change considerations (Robledo and Blaser 2009).

4.6.3 Discussion

The material interlinkages between the ITTO and the climate regime are undeniable. Both regimes have an interest in sustainable forest management, although for different reasons. For the ITTO, the concept is primarily related to sustained timber production and secondly to the conservation of forests; for the UNFCCC, sustainable forest management could contribute to climate change mitigation. Still, the institutional interlinkages are weak. While there is general awareness of each other's existence, normative developments in both the ITTO and the UNFCCC has taken place independently. That this may be changing is indicated by some first calls within the ITTO to take into account climate change considerations in the development of future guidelines.

More generally, it is clear that the ITTO sees a role for itself in climate change mitigation through the sustainable management of tropical forests, and that various actors within the organization want to enhance this role in light of international discussions on REDD. Whereas the ITTO's role was previously limited to raising the profile of afforestation and reforestation projects in the CDM, the discussions on REDD have provided the organization with a chance to profile itself internationally, and get more involved in the discussions in the climate regime. Recommendations to this end (Robledo and Blaser 2009), however, were not greeted with unequivocal support. Both producing (Brazil) and consuming (United States) countries warned against policy approaches that were not based on consensus within the ITTO, arguing that the organization should limit itself to reporting to the UNFCCC (IISD 2009). The reluctance of these nations to extend the mandate of the ITTO shows how countries are unwilling to allow normative developments in one regime to spill over to other regimes.

Given the uncertain nature of the REDD discussions within the UNFCCC, the implications for the ITTO remain to be seen. However, there are signs that a future REDD mechanism under the climate regime might have significant overlap with ITTO work. Given that ITTO is not part of UN-REDD, the partnership including various international organizations on REDD, there is a possibility that funds may be diverted away from the organization, and that the ITTO will focus rather on other environmental services within its REDDES thematic programme (IISD 2009).

4.7 Lessons learned

This brief analysis of the ITTO shows that there are a number of lessons that can be learned for forest governance and the efforts to reduce deforestation and forest degradation in the climate regime.

First, the case of the ITTO shows that it is difficult for an international legal instrument to focus on only one of the forest functions. While this was already acknowledged in the negotiations leading up to the ITTA 1983, the focus only really shifted towards sustainable forest management in the 1990s. However, the criticism of the ITTO shows that the notion of forests as providing commodities still dominates the organization's thinking and that the ITTO still struggles to fully integrate non-timber aspects into its work.

Second, the case of the ITTO shows that it is challenging to create incentives for sustainable forest management. Its Bali Partnership Fund depends on voluntary contributions and, partly as a result thereof, remains underfunded. Furthermore, its objective to achieve timber exports from sustainably managed forests by 2000 was not achieved, and remains a rather vague statement of intent rather than a concrete commitment. Even if the ITTA would include specific obligations for the ITTO members, it would still be marked by the absence of a compliance mechanism.

Third, this case shows how existing organizations try to redefine themselves in light of developments in the climate regime. The ITTO's thematic programme on REDDES is quite clearly inspired by heightened attention to REDD in the UNFCCC discussions. However, while some actors within the ITTO see REDD as an opportunity to highlight the ITTO's role in global forest governance, others rather would limit this role to the trade in tropical timber, conform its original mandate.

5 Comparative analysis

5.1 Introduction

Following our analysis of the individual regimes in relation to forests and climate change, this chapter turns to a comparative analysis in order to be able to derive some trends in the regime, lessons for the future, and to point to some of the key questions that may challenge the future development of REDD.

5.2 Comparison of the facts and institutional arrangements in the regime

All three regimes were established in the period 1985-1992, a period in which environmental awareness at global level was very high. ITTO has a relatively small membership base while the other two regimes have almost universal membership. All three bodies have a secretariat and that ensures programme continuity. Decisions are taken by consensus in all three bodies; however, in the GEF and ITTO weighted double majority is also used if consensus is not possible. The Conference of the Parties can take decisions; whereas in the GEF, its Council and Assembly make decisions; in the ITTO, the ITTC makes decisions. The GEF and the CBD have an institutionalized process of scientific support; while the ITTO relies more on 4 permanent committees. Each of the regimes has a very distinct objective. While the ITTO aims at facilitating trade between importer and exporter countries; the CBD has a more comprehensive goal of conserving biodiversity and promoting sustainable use of its components; as well as ensuring fair and equitable benefit sharing from the utilization of the genetic components. In contrast, the Global Environment Facility focuses on providing grant and concessional funding for financing the incremental costs of meeting global benefits; i.e. it finances the costs of achieving the global benefits, but not of achieving local benefits (see Table 5.1).

Table 5.1 General information on the three regimes.

	Convention on Biological Diversity	Global Environment Facility	International Timber Trade Organization
Year of establishment	1992	1991: pilot phase 1994: restructured	1985
Membership	193	182	60
Institutional arrangements	Decision-making: COP Scientific support: SBSTTA Administrative support: Secretariat	Decision-making: GEF Council and GEF Assembly (by consensus, if unfeasible, by weighted double-majority) Implementation: Implementing and executing agencies (World Bank, UNEP, UNDP and others) Scientific support: STAP Administrative support: GEF Secretariat	Decision-making: ITTC (by consensus, if unfeasible, weighted double-majority) Implementation: 4 Permanent Committees Administrative support: Executive Director and secretariat
Key objective(s)	1. conservation of biological diversity 2. the sustainable use of its components; 3. fair and equitable sharing of the benefits arising out of the utilization of genetic resources	Provision of grants and concessional funding to cover the incremental cost for projects that yield global environmental benefits	Facilitation and regulation of international trade in tropical timber between producer and consumer countries

Table 5.2 Incentives and disincentives provided by the regimes

	Convention on Biological Diversity	Global Environment Facility	International Timber Trade Organization
Reporting requirements	Every four years by member states on progress with measures taken to implement the treaty	Annual report by Secretariat	Soft requirement to provide information on timber trade and progress towards Objective 2000
Financial incentives	Financial mechanism operated by GEF	Financial mechanism of various environmental treaties	Bali Partnership Fund and Special Account, based on voluntary contributions

Targets and timetables	Non-binding 2010 Biodiversity target	Not applicable	Non-binding Objective 2000 of achieving tropical timber exports from sustainably managed sources
Technology transfer	Yes, provided IPRs are respected	Yes	Yes
Dispute settlement mechanism	(Weak) dispute settlement mechanism included in Convention	Not applicable	Disputes referred to ITTC

In terms of institutional interlinkages, there is a close link between the Clean Development Mechanism of the Climate Convention and sinks and REDD with the work of the CBD. The GEF is a financial mechanism for both the CBD and the UNFCCC. There are limited connections between ITTO and the climate regime.

Table 5.3 Interlinkages between the regimes and the global climate regime

	Convention on Biological Diversity	**Global Environment Facility**	**International Timber Trade Organization**
Material interlinkages with climate regime	Biodiversity at risk from climate change impacts; enhancement of forest carbon sinks, as envisaged by climate regime, bears both risk and opportunities for biodiversity conservation	Climate finance as a key tool for promoting mitigation and adaptation; Forests as part of the GEF's mandate, but broader than their carbon sink function	Complex; timber logging may lead to deforestation and thus reduction of carbon sink function. Sustainable forest management could result in both securing sustainable timber supplies and protection of carbon sinks, while potentially also helping forests adapt to a changing climate
Institutional interlinkages with climate regime	CDM and sinks; even more relevant in context of REDD	GEF as financial mechanism for both CBD, UNFCCC and two of the climate funds established under the Kyoto Protocol	Limited to date; A/R CDM projects, more relevance with the advent of REDD
Policy response to interlinkages	CBD COP decisions noting interlinkages; Establishment of expert group; Presence and involvement at UNFCCC COP side events	Guidance by CBD and UNFCCC COPs to the GEF as primary tool for interaction management	ITTC decisions noting interlinkages; Establishment of the REDDES work programme; involvement in UNFCCC COP side events

In terms of policy interlinkages, the CBD's COP is active in noting the interlinkages with the COP, has established expert groups and is an observer at the Climate COPs. The COPs of the Climate Convention and the Biodiversity Convention provide the guidelines about how financial resources should be disbursed by the GEF; however, this relationship with the GEF has been problematic from the start (Gupta 2006; Mace 2006). The ITTC decisions note the relationships with the climate change regime; they have established the REDDES programme and participate at the side events at the COPs (see Table 5.3).

5.3 The role of these bodies in REDD

Given the growing political significance of REDD, a critical issue is how have these entities decided to engage in the REDD discussions?

In relation to forestry in general, the CBD regime has an expanded programme on forest biodiversity and has established AHTEG on forest biodiversity. The GEF, in its fifth replenishment of its fund, developed a strategy for sustainable forest management, land use, land use change and forestry; while the ITTO has guidelines on sustainable forest management, guidelines on C&I for sustainable forest management; and guidelines on conservation and sustainable use of biological diversity in tropical production forests.

In relation to REDD in specific, the CBD is not directly engaged, except in terms of noting the interrelationships between forestry and climate change. GEF is active as a potential funding agency for sustainable forests and REDD. ITTO has established a Thematic Programme on Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests.

In terms of lessons learnt, the CBD provides a clear view of what sustainable forest management is and how to view this holistically. It is also trying to ensure that a holistic perspective is taken in REDD discussions. The GEF has struggled with the notion of incremental costs and additionality. Its separation of the global benefits from the local benefits was based on the assumption that there were resources in the developing countries to pay for the local benefits. The separation of these benefits has negatively affected the ownership of such projects. A practical approach has now been developed which may be of some use in the design of REDD projects. The GEF has also struggled with funding projects in different countries. While larger countries have greater problems and greater numbers of potential projects, smaller countries have fewer resources and less potential projects. Finding the right balance between providing resources to larger countries and smaller countries is a tricky issue, and the GEF has been working in this direction. The GEF has tried to create synergies with other regimes and this can be a useful lesson. At the same time, the conflict between the COPs and the GEF in terms of who is actually in charge of the funding mechanisms and their design has not yet been resolved and may remain a sore point in the future. ITTO faces a major challenge – while promotion of trade based on comparative advantages aims at ensuring efficiency in trade – the sale of products at the lowest costs; the goal of sustainable development leads to higher costs. The competition between countries with sustainable forests is an awkward competition – as those who can achieve sustainability at least cost will win. But does this imply that there will be competition in the definition of what is sustainability? These are difficult issues to resolve. Table 5.4 aims at summing up some of these issues.

Table 5.4 Organisation's involvement in REDD.

	Convention on Biological Diversity	**Global Environment Facility**	**International Timber Trade Organization**
Specific forest-related arrangements, work programmes, expert groups, etc.	AHTEG on forest biodiversity; Expanded programme of work on forest biodiversity	Strategy for sustainable forest management and LULUCF in fifth replenishment	Guidelines on sustainable forest management; Guidelines on C&I for sustainable forest management; Guidelines on conservation and sustainable use of biological diversity in tropical production forests
Activities directly relating to REDD	None specifically, apart from broader work on biodiversity-climate linkages	Funding envelope for sustainable forest management and REDD	Thematic Programme on Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests (REDDES)
Lessons learned from the organisation's functioning for REDD	How to take a (holistic) ecosystem approach to protecting forest biodiversity; How to integrate biodiversity concerns into REDD	How to deal with notions of incremental costs, global environmental benefits and additionality; How to channel funding to the right countries; How to create synergies in funding projects relevant to various environmental treaties	How (not) to combine different objectives in an organization (conservation and commodity trading); ???

6 Conclusions

This report has examined three regimes – ITTO, GEF and CBD – in their relationship to the climate change regime with a view to seeing what lessons can be learnt with respect to the design of the REDD instrument.

The experiences in the area of forest management are not encouraging in terms of their effectiveness in setting up an international system with targets and timetables and non-compliance mechanisms, or in terms of making a major dent in the problem of deforestation and land degradation. We draw some conclusions here with respect to conceptual issues, instrument design and management structure.

Conceptual issues:

Some of the forest regimes focus primarily on one goal and add other goals as well while others have a more comprehensive approach (e.g. CBD). However, it is not clear if the sectoral approaches are more effective in achieving their own goals than the more comprehensive approaches. It does not appear as if negotiations on sectoral and more focused issues are more likely to lead to a regime of timetables and targets and non-compliance mechanisms than in more comprehensive regimes – at least in relation to forestry related issues.

Another issue is that funding that focuses on merely financing the global benefits of projects may be counter-productive. The incremental costs debate within the GEF has been highly controversial and although a pragmatic approach to interpret this has been found, it remains challenging as it may generate resources for global benefits while resources for local benefits may be lacking, thereby alienating the very people who are expected to implement the project.

Instrument design

In terms of instrument design, two of the three regimes focus on voluntary targets and timetables; however as there is no systematic evaluation of the effectiveness of these targets and there are no non-compliance mechanisms, the actual effect of these is difficult to assess.

The ITTO has guidelines on forestry; but whether these have been effective in influencing countries is not clear.

Project based approaches used in the GEF and probably ITTO are not likely to address the problem of leakage. Deforestation addressed in one place may be compensated by increased deforestation elsewhere.

None of the regimes seem to have any clear monitoring and non-compliance regimes and so without monitoring there is no real tool to assess effectiveness.

The regimes include some form of reporting. However, the reporting appears to be a voluntary formality.

Management structure

The voting system of the ITTO appears to show how a voting system should not be organized. It is complex and has probably perverse outcomes. The voting system of the GEF may be preferable; but this needs further investigation.

Using the GEF by the environmental treaties is useful in terms of its ability to raise resources; but there is a real problem with respect to who actually runs the GEF. Do the Conference of the Parties and their decisions determine spending by the GEF or does the GEF determine how spending should be done. This ongoing stress has been cause for much discussion within the GEF and the COPs.

Synergies between conventions are however easier to realize when there is a joint funding agency. The GEF has attempted at using these synergies in order to create a cross cutting area – sustainable forest management. However, there has been no evaluation to see if the anticipated benefits have actually been achieved.

Learning from the lessons from the development cooperation arena, the GEF tried to increase the effectiveness of its aid lending by lending to countries with good governance and a good track record. This was translated into the Resource Allocation Framework. The impact of this Resource Allocation Framework was that money was channelled to the larger developing countries with a sound system of governance; and the smaller countries with poorer governance systems were unable to access the information. The STAR system that replaced this has a guaranteed minimum per country, irrespective of size and problem. The effectiveness of this is also likely to be problematic as past experiences of aid to countries without effective governance systems has not always been good.

Possible research questions for future follow up

In order to compensate for the general lack of information about the specific effectiveness of individual instruments and incentives, the country specific case studies and further follow-up research envisaged in this project needs to examine the following questions:

1. What are the difficulties in implementing sustainable forestry projects? What are the most appropriate definitions and guidelines for defining sustainable forestry? How can these be made relevant for the REDD discussions?
2. What are the positions of national stakeholders on the concept of incremental costs and additionality? To what extent is the payment for carbon credits related to these notions?
3. To what extent is the STAR system seen as useful in ensuring both geographical equity and project effectiveness? Will such a system help to balance the expected geographical inequities created by a market mechanism, as it has done in the CDM?
4. What is the relative experience of the voting system in the ITTO system, the CBD system and the GEF system? Which would be more appropriate for a governing system for REDD?
5. Learning from the experiences of competition between the COPs and Governing Council of the GEF, how can a management system be organized between the climate change regime and the REDD body which is hosted by different UN agencies?
6. How can the synergies between different programmes hosted by the different agencies involved in REDD be optimized, monitored and evaluated?
7. Are voluntary targets effective in changing national policies and practices?
8. Are ITTO guidelines effective in changing national policies and practices?
9. What are the effective tools to address deforestation and land degradation at local level and how can these be steered from the global level?

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